





ANNUAL REPORT

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FOSTERING AGRICULTURAL MARKETS ACTIVITY (FARMA)

NOVEMBER 2014

This publication was produced for review by the United States Agency for International Development and the Swedish International Development Cooperation Agency. It was prepared by the Fostering Agricultural Markets Activity Project (FARMA), which is funded by USAID and Sida.

COVER PAGE PHOTOS:

- I. DISTRIBUTION OF 96 TONS OF ANIMAL FEED TO 78 DAIRY FARMERS IN DOBOJ AREA (TOP)
- CLEANING THE MUD AND DEBRIS ON A DAIRY FARM OF THE PROJECT BENEFICIARY (BOTTOM, LEFT)
 DISTRIBUTION OF EMERGENCY 90-DAY SUPPLY OF ANIMAL FEED AND FORAGE SEEDS FOR RECOVER 84 HECTARES IN AREA OF ŠAMAC (BOTTOM, RIGHT)
- 4. MAP OF BOSNIA AND HERZEGOVINA SHOWING IMPACTED REGIONS IN WHICH FARMA PROJECT ASSISTS THE FARMERS AND PRODUCERS IN FLOOD RECOVERY EFFORTS (CENTER)

PHOTO SOURCE: FARMA project

MAP DESIGN: ZOLTAN MILIĆ, FARMA M&E

FOSTERING AGRICULTURAL MARKETS ACTIVITY (FARMA)

Contract No.168-C-00-09-00102-00 FARMA - Bosnia and Herzegovina (BiH)

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LIST OF ACRONYMS

A/R	Accounts Receivable	KRA	Key Result Area
APR	Annual Percentage Rate	LAMP	Linking Agricultural Markets to Producers Project
APS	Annual Program Statement	LGSA	Local Government Support Activity
ACED	Agency for Cooperation, Education and	LLC	Limited Liability Company
	Development	LINK	Association for Entrepreneurship and Jobs
B2B	Business-to-Business	LoP	Life of Project
BAM	Bosnian Convertible Mark	MAP	Medicinal and Aromatic Plants
BBI	Bosnia Bank International	M&E	Monitoring and Evaluation
BiH	Bosnia and Herzegovina	MEDI	Micro Enterprise Development Initiative
BHEPA	BIH Export Promotion Agency	MIMIS	Municipal Management Information System
CBI	Centre for the promotion of imports from	MFI	Microfinance Institution
	developing countries	MoFTER	Ministry of Foreign Trade and Economic
CEFTA	Central Europe Free Trade Area		Relations
COP	Chief of Party	MOU	Memorandum of Understanding
CCA	Cluster Competitiveness Activity	MT	Metric Ton
CIM	Centre for International Migration and	NERDA	North-East Regional Development Agency
	Development	NGO	Non-governmental Organization
CRP	Center for Development and Support	NIB	National Institute of Biology
CRS	Catholic Relief Services	NRMP	National Residue Monitoring Plan
CzDA	Czech Development Agency	ODRAZ	Foundation for Sustainable Development
DAI	Development Alternatives Inc.	OK	Organic Control
DAN	Development Agency North	OSCE	Organization for Security and Cooperation in
DCA	Development Credit Authority		Europe
DF	Development Fund	PDF	Partners Development Fund
DFID	Department for International Development (UK)	PDO	Protected Designation of Origin
DGP	Development Grants Program	PEA	Programmatic Environmental Assessment
EBITDA	Earning Before Interest, Taxes, Depreciation &	PERSUAP	Pesticide Evaluation Review and Safe Use Action
	Amortization		Plan
EC	European Commission	PFS	Partners for Financial Stability
EEC	European Economic Community	PGI	Protected Geographic Indication
EPPO	European and Mediterranean Plant Protection	PHA	Plant Health Administration (BiH)
	Organization	PIR	Project Intermediate Result
EU	European Union	PLOD	Center for Promotion of Local Development
EUR	Euro	PMP	Performance Management Plan
F&V	Fruit and Vegetable	PO	Partner Organization
FADN	Farm Accountancy Data Network	PUM	Netherlands Senior Experts Program
FARMA	Fostering Agricultural Markets Activity	RCI	Regional Competitiveness Initiative
FBiH	Federation of Bosnia Herzegovina	RDA	Regional Development Agency
FDI	Foreign Direct Investment	R&D	Research and Development
FTC	Foreign Trade Chamber	REDAH	Regional Development Agency for Herzegovina
FRK	Farm Record Keeping	REZ	Regional Development Agency for the Region of
GAP	Good Agricultural Practice GAP II Governance	DEA	Central Bosnia
CDD	Accountability Project, Phase II	RFA	Request for Applications
GBP GDP	Good Beekeeping Practices Gross Domestic Product	RMP ROI	Residue Monitoring Plan
GFP	Good Feeding Practice	RS	Return on Investment Republika Srpska
GHP		SAA	·
GIZ	Good Hygienic Practice Deutsche Gesellschaft für Internationale	SDR	Stabilization and Association Agreement Special Drawing Rights
GIZ	Zusammenarbeit	SERDA	Regional Development Agency for Sarajevo
ClobalCAD	Global Good Agricultural Practice	Sida	Swedish International Development Agency
GP	Good Practices	SIPPO	Swiss Import Promotion Programme
Ha	Hectare	SMS	Short Message Service (text messaging via cell
HACCP	Hazard Analysis and Critical Control Points	3113	phone)
HPLC	High Pressure Liquid Chromatography	SOP	Standard (or Standing) Operating Procedure
ICEA	Instituto pre la Certificazione Etica e Ambientale	SPIRA	Streamlining Permit and Inspection Regimes
ICS	International Control System	31 110 (Activity
IEE	Initial Environmental Examination	SPS	Sanitary and Phytosanitary
IGA	Investment Guarantee Authority	STTA	Short-term Technical Assistance
IMF	International Monetary Fund	SVO	State Veterinary Office
IPA	Instrument for Pre-Accession Assistance	SWG	Standard Working Group – a coalition of
IPARD	Pre-accession Support for Rural Development		ministries of agriculture of the countries of the
IPM	Integrated Pest Management		region
IRB	RS Investment Development Bank	TA	Technical Assistance
IOAS	International Organic Accreditation Service	TAIEX	Technical Assistance and Information Exchange
ISO	International Organization for Standardization		instrument
JICA	Japan International Cooperation Agency	ToT	Training-of-Trainers
JMC	Joint Management Committee	TSG	Traditional Specialty Guaranteed

UNECE United Nations Development Program UNECE United Nations Economic Commission for USC Una-Sana Canton Europe USD U.S. Dollar UNCTAD United Nations Conference on Trade and USK see USC Development VCE Value Chains for Employment WTO World Trade Organization	UHT	Ultra-High Temperature	USAID	United States Agency for International
Europe USD U.S. Dollar UNCTAD United Nations Conference on Trade and Development USK see USC VCE Value Chains for Employment	UNDP	United Nations Development Program	LICC	Development
UNCTAD United Nations Conference on Trade and Development USK see USC VCE Value Chains for Employment	UNECE			
Development VCE Value Chains for Employment	LINICTAD			
	UNCTAD			
		Development		

EXECUTIVE SUMMARY

This is the fifth annual report of Fostering Agricultural Markets Activity (FARMA), an agricultural development project in Bosnia and Herzegovina (BiH) that is jointly fundeded by the U.S. Agency for International Development (USAID) and the Swedish International Development Agency (Sida). This report provides an update of results and accomplishments attained over the project Year 5 (September 2013 – August 2014) in relation both to the previous year (Year 4 of the project), and the baseline. Since the start of the project, FARMA has assisted more than 560 producer organizations (POs) and more than 21,600 farmers, and has had significant, positive impact on the BiH agricultural sector.

In Year 5, BiH experienced severe floods that severely affected agricultural producers particularly in the north-eastern, east, central and northern part of the country. Thousands of people were forced from their homes. Floodwaters caused more than 2,000 landslides across BiH, spreading damage across many towns and villages. Thirty municipalities in the Republic of Srpska and 22 municipalities in the Federation of Bosnia and Herzegovina were affected. About 70,000 hectares of land were flooded, causing significant damage to agricultural crops – particularly cereals and vegetables. On average, the flooded area represents 17 percent of the total planted area in the affected municipalities/cantons. In addition, some agricultural service providers have been flooded, including the Agricultural Extension Service (PSS) Doboj, the Agriculture Institute in Banja Luka, and some veterinary services, which impedes their action in the field. The UN Food and Agriculture Organization (FAO), which led the preparation of the flood impact assessment on the agricultural sector, established the preliminary damage estimate at approximately BAM 200 million.

The floods, which were caused by the heaviest rainfall in 120 years of recorded weather measurements, occurred at a very critical time in the agricultural calendar: one month before the harvest of cereals and after the maize planting. Farmers producing under greenhouses had already transplanted vegetables. Loss of agricultural perishables such as agricultural inputs (e.g. stored animal feed, fertilizers, manure, and plant protection) was widespread, as agricultural inputs which came in contact with the flood waters were washed away, contaminated, and rendered useless. Most affected were hay and silage in areas that were submerged for more than 24 hours. Significant quantities of agricultural equipment were also affected.

To respond to the devastation, USAID and Sida provided an estimated US\$2.26 million for grants to FARMA, and the project invited interested POs to apply for funding for flood relief and recovery. The goal of this assistance is to help restore the production and income of the most affected farmers and to reconnect rural communities and markets. The flood relief and recovery fund assists producers in the following municipalities: Bijeljina, Bratunac, Brčko, Čelić, Doboj, Doboj Istok, Doboj Jug, Domaljevac, Donji Žabar, Gračanica, Kozarska Dubica, Maglaj, Modriča, Novi Grad, Odžak, Orašje, Petrovo, Prijedor, Šamac, Sanski Most, Srebrenik, Vukosavlje, Zavidovići, Zvornik, and Žepče.

Despite the floods, total sales of FARMA beneficiaries are estimated to have risen by 2% in relation to the previous year, or 56% since the start of the project (LOP target is 65%). While the LOP target has not been met for the three agricultural subsectors combined, the sales in the dairy sector and the medicinal and aromatic plants (MAPs) sector are estimated to have increased by more than 65% between 2009 and 2014. Therefore, two out of the three subsectors are estimated to have exceeded the LOP target in sales. Furthermore, one subsector (MAPs) exceeded the LOP target of 84% for the growth in exports among FARMA

beneficiaries. In total, FARMA beneficiaries are estimated to have experienced a growth in exports of 72% between 2009 and 2014.

The fruit and vegetable sector is estimated to have experienced an increase in sales of 16% between 2009 and 2014 – the relative underperformance is due to adverse weather conditions in 2012 and the floods in 2014, which also negatively affected exports in those years. Despite these challenges, exports of FARMA beneficiaries in this subsector are estimated to have increased by 51% between 2009 and 2014. A significant contribution to the improved performance is a result of FARMA's efforts to improve post-harvest handling through cold chain facilities, improved packaging, commercialization of new varieties (resulting in increased sales of raspberries and cultivated blueberries targeting the fresh market), as well as certification according to the GlobalGAP standard, which has enabled access to the EU markets.

Due to 2014 floods, the dairy sector is also experiencing a slower growth in sales (estimated at 2% growth between 2013 and 2014), while exports are estimated to have declined by 5%. The inability to export milk to Croatia (now an EU member) reduced exports from the dairy sector. According to associations of dairy farmers in the RS and FBiH, the sector is also affected by EU/Russian trade wars, as subsidized milk from the EU is entering BiH in large quantities, thus causing greater competition for domestic producers and price declines. (Note, however, that MoFTER has stated that they have not seen evidence of increased imports from the EU.)

The growth in sales in the MAP sector is estimated to be just over 4% between 2013 and 2014 (export growth is estimated to be 14%). The growth in exports is expected to be relatively strong, as heavy rainfall experienced in 2014 has benefited producers trading in wild mushrooms. The growth in sales over the LOP (2009-2014) is estimated to be 78%, while exports are estimated to have increased by 160% among FARMA beneficiaries. FARMA has made a significant contribution to this result through efforts to improve the production of essential oils, value addition, marketing and promotion, and by advancing the cultivation of medicinal and aromatic plants over forest collection.

Between 2013 and 2014, full-time employment among FARMA beneficiaries decreased by 2%. This is the second time that job losses have been experienced – the last time, in 2012, was when heavy snow caused several companies to declare bankruptcy. In 2014, significant job losses were also experienced at PPM Dairy in Tuzla following a foreign purchase. The LOP target of 45% is full time employment has not been met. The total growth in employment among FARMA beneficiaries has been 2 perecent between 2009 and 2014, or 137 new jobs.

However, it is important consider changes in full-time agricultural employment in the context of other employment and income-generation opportunities that have opened up as a result of FARMA efforts, namely part-time and seasonal employment as well as employment in primary production. Part-time and seasonal employment by FARMA beneficiaries increased 7 percent between 2013 and 2014. However, most of the agricultural employment is in fact in primary production. More than 32,000 people are suppliers of raw materials to FARMA-assisted POs (these are indirect employees or cooperants). FARMA's efforts are also sustaining agricultural employment which can be commercially viable in itself or a supplemental income and a safety net for thousands of rural people. Finally, FARMA has dedicated significant effort to help these cooperants improve yields and product quality and therefore farm profitability.

While these are important gains in agricultural employment, in the long run agricultural employment in BiH will likely decrease as farm size and efficiency increase. This has been the case in other countries as their economy develops. For example, agricultural labor input in the EU has decreased by 32% between 2002 and 2012 – with job losses concentrating in

the 12 member states that joined the EU in 2004 and 2007.¹ Notwithstanding the above, agriculture as a sector will remain critical in BiH, as well as the EU, in maintaining employment in rural areas, providing food, safeguarding viable rural societies and infrastructure, and maintaining traditional rural landscapes. Viable rural societies would be impossible without agriculture, particularly in remote, sparsely populated areas, which lack business potential and market opportunities.

FARMA also has achieved significant results at the institutional level. The EU Food and Veterinary Office (FVO) Mission to Bosnia and Herzegovina evaluated the system of official plant health controls related to potato production and the certification of potatoes for export to the EU in March-April 2014. This was the first audit carried out by the FVO in BiH on plant health matters. The assessment was generally encouraging, with following remarks noted in the EU Progress Report for 2014: "Official controls and the situation as regards the main harmful organisms affecting potatoes were assessed as generally positive. The legal framework, work of diagnostic laboratories, and control at border inspection points are generally harmonized with the EU *acquis*. Certain insufficiencies have yet to be remedied to enable the export of ware potatoes to the EU." The BiH Plant Health Administration is required to submit a monitoring report for 2014 before the EU can make a final decision on imports of BiH potatoes to the EU.

In addition, an inspection of milk and facilities for export of milk to the EU was carried out in January 2014. The objective of this audit was to evaluate the operation of controls on the production of dairy products for human consumption intended for export to the EU, as well as certification procedures. Unfortunately, the audit findings were negative in several areas, noting "inefficient and ineffective organization of official controls," along with "lack of efficient supervision and inconsistent controls" which stem from "the organization of the veterinary service with its veterinary departments and inspectorates, [which] reflects the constitutional organization of BiH." However, audit findings also concluded that "the laboratory services are technically capable of testing for the raw milk quality parameters specified in Regulation (EC) No 853/2004." This is a validation of the success of the "Strengthening capacity of veterinary laboratories and veterinary inspection services for implementation of the National Residues Monitoring Plan (NRMP) in accordance with EU standards" project, implemented by FARMA in collaboration with the Czech Development Agency (CzDA). The EU Progress Report for 2014 also noted "there was a rise in the number of accredited laboratories, as well as in the number of accredited laboratory methods for diagnostics of animal diseases, microbiological analyses, and control of residues of veterinary medicines. Bosnia and Herzegovina continued to implement a residue monitoring plan."

In 2014, FARMA has also helped 13 POs achieve desired certifications to access EU markets, reaching a total of 52 POs achieving certifications since 2009 (exceeding the LOP target of 50).

Finally, FARMA continued to provide producers with assistance accessing finance. Trainings were organized on topics related to financial analysis, business angels, project proposal writing, business planning, management of receivables, liquidity, and VAT in agriculture. As of the end of August 2014, seven business plans attained new financing totaling 711,360 KM. Also, a joint venture company of FARMA beneficiary Mushroom and a Dutch investor was completed. The joint venture company is named "Casa Mushrooms" and is based in Nova Topola business zone. Also, FARMA beneficiary Dars Voce d.o.o. from Derventa attracted foreign investment from Turkey, which injected 1.5 million KM into the company to expand production capacities.

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http://ec.europa.eu/agriculture/rural-area-economics/briefs/pdf/08_en.pdf

ABOUT THE PROJECT

FARMA is a \$22.2 million, nearly six-year program co-financed by the U.S. Agency for International Development (USAID) and the Swedish International Development Cooperation Agency (Sida), and implemented by Chemonics International with Orgut Consulting-AB.

Bosnia and Herzegovina is in a unique position in the current global economic environment to spur economic growth and establish a foundation for sustained access to regional and international markets. In this context, FARMA's objective is to achieve rapid, sustainable, and broad-based economic growth through demand-driven technical assistance aimed at improving the competitiveness of BiH agricultural producers, agricultural businesses, and products in targeted subsectors. FARMA is working to expand environmentally sustainable production, processing, domestic sales, export sales, and the production of value-added products.

FARMA's approach focuses on four integrated components:

- Building sustainable market linkages for BiH producers;
- Increasing access to finance;
- Building the capacity of partner organizations and other counterparts; and
- Enhancing the policy environment to benefit the competitiveness of BiH agricultural goods.

In FARMA, Sida and USAID have created a program that is helping BiH accomplish several critical objectives: increasing agricultural competitiveness; meeting European Union accession standards; reducing poverty by expanding environmentally sustainable production; and increasing sales, exports, and employment.

CONTEXTUAL BACKGROUND

The purpose of this section is to describe the wider environment and conditions during the reporting period that affected the project, the country, and the region. Understanding the accomplishments and challenges of FARMA requires this larger context. While these factors can positively or negatively affect FARMA's work, they do not change the project's implementation approach.

EUROPE

Developments in the EU have a significant effect on BiH. Changing circumstances may have a significantly positive or negative effect on the political and economic stability of BiH.

Thanks to favorable economic policies and an improvement in the financial environment, recovery, albeit relatively slow, in the eurozone continued. Although the key factors for analysts' growth forecasts were essentially unchanged, the risk factors continued to evolve. In the external context, the advanced economies appeared to be stronger, while uncertainties have materialized in some emerging markets, although the risk of widespread contagion remained small.

However, the Ukrainian conflict is likely to have an adverse impact on the economies of Europe. Significant economic and other risks persist as a result, and these could affect the recovery both in EU's periphery and in its developed economies.

For example, Russia enacted a ban on all imports, including agricultural imports from the EU and the U.S. At first glance, the sudden cancellation of about US\$ 9 billion in food imports could look like a windfall for Russia's uncompetitive agricultural sector, which is suffering from two decades of underinvestment. However, in the short term, domestic producers will only be able to replace a relatively small part of the lost imports. The main beneficiaries of the ban will be exporters in the Russian-led Customs Union, Latin America and the Pacific Rim, who can boost exports to Russia free of European competition.

When considering impact on BiH food exports to Russia, three possible scenarios can be envisioned:

- No change: Export of agricultural products from BiH to Russia will remain at approximately the same level as recorded over the past few years. This is likely if other countries which can export to Russia decrease their prices relative to BiH, in order to facilitate their own export growth and eliminate competition in this lucrative market.
- 2. Increase of exports: Due to a shortfall, Russia would seek any available agricultural goods from the countries that had not enacted trade sanctions. However, due to floods and a generally poor agricultural season in BiH, it is not very likely that this scenario would pan out in reality. If it does happen, the increase in exports would not be large (<10%).
- 3. Massive increase in exports: This would occur if the goods from the EU are repackaged and sold to Russia under BiH label. This would result in a relatively small gain for local enterprises (as their profits would be little more than a "commission" for services rendered). These gains would not be sustainable in the long-run, as the exports would decline immediately as soon as the U.S. and EU rescind their sanctions.

At this point, the most likely scenario is the "small export increase" scenario of less than 10 percent. FARMA will continue monitoring the situation to assess the effects of the Russian import bans on BiH agricultural trade.

REGION

Regional developments have very important repercussions for BiH. The largest trade partners of BiH are its neighboring countries, Croatia and Serbia. These countries have a complicated history with BiH and each other, but the relationships persist. Consequently, regional developments have impacts (positive and negative) on BiH and its economy.

During the reporting period, Croatia remained stuck in an unusually drawn out recession. In 2013, real GDP contracted for the fifth consecutive year, and the trend continued in 2014. Unemployment has risen to 16.5 percent (ILO standardized rate). Domestic demand remained depressed as corporations and households focused on reducing excess debt levels accumulated during the boom period in the mid-2000s. Exports and FDI were also feeble, reflecting poor trading partner growth and structural weaknesses. With many of Croatia's economic problems owing to the persistent economic contraction, reviving economic growth and generating employment is a high priority. This may adversely impact exports of agricultural products to Croatia. However, as this report is being written, signals of a strong recovery are absent. This situation is likely to persist in the next year.

Serbia continued to struggle economically, as well. Erste Group is projecting that the economic growth of Serbia will slow to 1 percent in 2014, down from the anticipated 1.8 percent its analysts projected previously in a CEE outlook 2014 report. Serbia (and Croatia) are on the path to becoming the only countries whose fiscal deficits will break the 3 percent GDP Maastricht limit. The 2014 austerity plan is in effect in Serbia. It includes cuts in subsidies and public administration costs, along with a tax increase and pushing the retirement age for women to 63. These are measures which do not have popular support. In addition, the country needs to borrow heavily to cover the shortfall and settle debts. The 2014 budget includes a plan to borrow an additional EUR 5.7 billion, while EUR 3 billion in new loans was already earmarked to cover the country's due debts. The real question is how long Serbia will be able to pursue such a policy before it can no longer fund its ongoing obligations. The situation is made even worse by the flood damage, increasing speculations about Serbia's solvency.

The economy of Slovenia (until recently the only ex-Yugoslavian country in the EU) was also struggling. The Slovenian cabinet agreed to increase excise duties to compensate for the shortfall of some EUR 200 million (USD 275 million) in the 2014 national budget after the Constitutional Court quashed the 2013 real estate tax act in late March. Apart from lifting excise duties, mostly on tobacco and alcohol, the coalition government also agreed to fill the budget gap by saving up to EUR 50 million in the public sector, and to revise regulations to allow companies that have overdue obligations to pay them in several installments, and to reprogram their tax debts. Slovenia also applied for funding from the EU Solidarity Fund due to budgetary issues.

Montenegro has been in EU accession negotiations for quite some time. Official EU reports praise Montenegro's dedication and commitment to the "European path." Its economy appears to be growing. In March 2014 the IMF projected a 2.7 percent growth in GDP for 2014 (. It remains to be seen what the state finances will look like at the end of the year, but even weak growth would be a very welcomed change of pace for the country.

DOMESTIC DEVELOPMENTS

Any domestic development may have positive or negative impact on the agricultural economy, thus the FARMA project monitors the local political, social, and economic conditions to identify potential opportunities and problems for project implementation, if possible well before they occur.

Over the course of the year, the BiH Minister of Foreign Trade and Economic Relations was removed from office. The Parliament of BiH adopted the proposed budget at the 11th hour (12/30/2013), paving the way for additional IMF funds transfers to boost the budgets of both Entities. The economy remained shaky, without any structural reforms.

In terms of EU integration, the message from Brussels at the end of 2013 is the same message heard at the end of 2012 - a message of "serious concerns over the lack of political will in the country." The 2012 assessment that BiH was far behind its neighbors in the process of EU integration applied to 2013 again, while the precondition for the "next bold step" on the path to accession remained the same - agreement on implementation of the "Sejdić-Finci"ruling. Hence, it was not a surprise that the EU rescinded EUR 45 million of the Instrument for Pre-Accession Assistance (IPA) funds for BiH. This was supposed to be a punitive measure, designed to indicate displeasure with the apparent lack of progress on all fronts, specifically political. The EU also mentioned that if BiH does not make any progress, IPA 2 funds (EUR 80 million per year, over the next 7 years) could be lost, as well. Yet, it seems that the effect desired from rescinding the funds is absent.

The new calendar year (2014) brought about turbulent events. In protests called the "Bosnian Spring" for the sheer depth of their intensity, unemployed youth, war veterans and disgruntled workers, among others, set fire to government buildings in Sarajevo, Bosnia and Herzegovina's capital, and across the country. The Bosnian news media reported that hundreds had been injured during the protests, including dozens of police officers, with bursts of violence in Sarajevo, in the northern city of Tuzla, in Mostar in the south, and in Zenica in central Bosnia.² Former High Representative, Christian Schwartz-Schilling commented "...once the poverty level reaches a certain barrier, once pensioners no longer receive their pensions, when teachers no longer receive their salaries and policemen aren't paid - which is on the horizon - then a violent movement is more than likely to emerge. Whether or not this will be positive? We can't say that with any certainty now.³"

Then, between 1May 14 and 18, 2014, a low-pressure area designated "Yvette" or "Tamara" affected a large area of Southeastern and Central Europe, causing floods and landslides. Serbia and Bosnia and Herzegovina suffered the greatest damage, as the rain was the heaviest in 120 years of recorded weather measurements.⁴ By May 20, at least 62 people had died as a result of the flooding, and hundreds of thousands had been forced from their homes. The towns of Obrenovac in Serbia and Doboj in Bosnia and Herzegovina account for most of the victims, after being inundated by waters several meters high from nearby rivers. The floods had a severe impact on Bosnia and Herzegovina. Damages are estimated at EUR 2 billion.⁵ The effect on agriculture has been significant in affected regions. For more information on the impact of floods on agriculture see "Post-Flood Relief and Recovery Response" section.

With the course of time, floods, and approaching elections (October 2014), the protest movement seemed to have fizzled. It remains to be seen if the results (or their absence) after the elections will spark new protests. Unfortunately, with virtually no possibility of implementation of structural reforms before the general elections, and the uncertainty of progress, especially in the domain of economic affairs, after, it is exceedingly difficult to foresee the near-term economic and social developments and their effect on the country's economy as a whole, and especially its agricultural sector. Hence, overall the agricultural economy

⁵ http://www.dw.de/%C5%A1ta-nakon-procjene-%C5%A1teta-od-poplava/a-17719921

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² http://www.nytimes.com/2014/02/08/world/europe/protests-over-government-and-economy-roil-bosnia.html?_r=0

³ http://www.dw.de/bosnia-its-just-like-ukraine/a-17420506

⁴ Sito-Sučić, Daria; Sekularić, Ivana (15 May 2014). "Bosnia, Serbia hit by worst flooding in 120 years; three die". Reuters, and "Serbia and Bosnia Hit by Worst Flood in 120 Years, as Three Are Reported Dead". Independent.mk. 16 May 2014.

ANIMAL AND DAIRY SECTOR

The primary objectives of the dairy program include: (1) improving hygiene and milk quality and reaching EU standards; (2) improving the quality and volume of on-farm forage, while reducing costs; (3) improving dairy herd genetics; (4) improving record keeping; and (5) greater production of higher value products.

BACKGROUND

The multi-functionality of the dairy sector, associated with the provision of basic foods for consumers and raw materials for food-processing and leather industries, as well as its contribution to rural development, biodiversity, and employment, makes it a major agricultural sector in BiH. BiH farms, by and large, are small (1–5 cows). These farms have a more social than economic role, providing livelihood and satisfaction of basic needs. In recent years, new economic and institutional realities, accompanied by the EU accession pressures, have begun to change the profile of the dairy sector.

Bosnia and Herzegovina has still not met all the conditions for the export of dairy products to the EU. This is noticeably impacting the dairy sector, which exported significant quantities of Ultra High Temperature processing (UHT) milk to Croatia. The visit of the EU's Food and Veterinary Office inspectors took place in January 2014. The EU inspectors checked the system of official control and found a "lack of efficient supervision and inconsistent controls" coupled with "non-robust and unreliable certification procedures." However, the project continued its work with producers and processors to ensure compliance with EU requirements, and to ensure production of sufficient quantities of quality milk.

ANNUAL HIGHLIGHTS

- Assisting in the assessment of flood damages and flood recovery.
- The Association of Cheese Producers in Bosnia and Herzegovina organized the promotion of local gourmet cheeses at the Sarajevo Holiday Market with support of USAID / Sida FARMA.
- The Association of Cheese Producers in Bosnia and Herzegovina, with support of the USAID / Sida FARMA project, presented selected products of their members at the 6th International Salon of wines and delicacies "VinDel 2013," held in Maribor (Slovenia).
- A number of practical trainings for veterinary inspectors and large dairy producers were held in both Entities, with the goal of preparing their organizations for the arrival of the EU FVO (Food and Veterinary Organization) Mission in Bosnia and Herzegovina.
- Training on "Official controls in dairies and farms of dairy cows in line with EU requirements and the certification process for shipments of milk and milk products intended for export to the EU" was held in Čitluk.
- Continual technical assistance was provided to farmers on improving feed ratios, feeding practices, and farm management.

SECTORAL DEVELOPMENTS

Simultaneous decrease in exports and imports along with improved sales results, indicate import substitution taking hold in this sector.

Overall sectoral results are encouraging, despite harsh economic environment and negative impact of climatic events. The value of sales of the project beneficiaries grew over the year, to reach an estimated 2 percent growth YOY (79 percent LOP growth). This growth is a result of the combination of factors. First, dairies managed to shift their exports to the East- selling their milk and value-added products to non-EU neighboring (Serbia, Montenegro) and

countries in relatively close proximity (Kosovo, Albania). Further, closure of Croatian market forced local dairies to refocus not only on exports but to local markets. Previously, a large portion of produced milk would leave BiH as a raw product, only to be imported back from Croatia as finished product. Now, the dairies are focusing back on domestic consumers, offering an expanding palette of the products in local markets.

This conclusion is corroborated by the official export statistics. The sectoral exports were in significant decline. Per official data (period Jan-Jun 2014; BiH Foreign Trade Chamber) export of dairy products from BiH declined by 34 percent in relation to period Jan-Jun 2013. This hardly comes as a surprise, given the overall sectoral developments. Dairy products cannot be exported to EU, and the export to other CEFTA-countries is not sufficient to make-up for the loss. In addition, total production volumes were affected by the floods and loss of adequate animal feed.

Dairies are focusing more on domestic market as a result of inability to export to EU.

However, the sectoral imports were declining too. Over the first six months of 2014, the imports declined by 19 percent in relation to the same period of 2013. This development corroborates the above assertion that domestic producers focused on domestic markets to minimize EU export losses, which was an expected and logical action of producers. Refocusing sales efforts in domestic market allowed producers to substitute (to a certain extent) export revenues with in-country sales proceeds.

In addition, procurement of raw milk from farms continued to increase. Small dip in demand was recorded during the period of floods, which was expected. Overall, at the national level (excluding Brčko District) the quantity of milk procured by the large dairies increased by 7 percent in 2014 YOY. This is another indication of the persistent market demand. Given the fact that (according to experts) there's about 300 million liters of milk shortage each year in country, it is obvious that dairies have been jockeying for the position of the domestic market leader. Moreover, the small dairies continued production of value-added products, such as cheese and spreads. The casual glance of the cheese section in large supermarkets around the country confirms improved position of local cheese makers- a number of FARMA beneficiaries are present in these supermarkets, thus increasing volume of products sold and consequently, the revenue. This allowed cheese producers to invest in small, but strategically vital production initiatives, and to venture into Eastern markets (Serbia, Montenegro, Kosovo). For more details about sectoral developments, accomplishments of the FARMA beneficiaries, and project results, please read the remainder of this section.

YEAR 5 MILESTONES		
Milestones	Status	Explanation
At least three promotional events organized where dairy products are sold	Completed	Includes promotion in Serbia and Croatia
Web page and the Facebook page developed for the BiH Association of Cheese Producers	In progress	Facebook page complete and regulalrly updated
Minimum 10 press releases about the Association of Cheese Producers	In progress	
Beneficiaries in Dairy Sector attend at least one international fair	Completed	Serbia and Croatia
Visible presence of small cheese producers in local markets	Completed	
At least 20 POs attended trainings on business planning / completing loan applications	Completed	

YEAR 5 MILESTONES		
Milestones	Status	Explanation
At least 20 POs attended presentation about new financial products	Completed	
At least one PO (from any one of the sectors) accessed FDI	In progress	
Increased profit of POs and processors through usage of better quality of milk and production of value added products	Completed	
20 farmers obtained AI certificates	Completed for 18 farmers	
At least 10 trainings organized in technical topics and EU standards	Completed	Usually in collaboration with local institutiosn and dairy processo
Development of farm gate products	In progress	
Improved milk quality in cheese processing facilities	In progress	
New dairy products /variety of cheese	Completed	
At least 50 more farms started with record keeping	Completed	
At least 5 study tours (in-country and abroad) organized and performed	Completed	
New farm techniques disseminated and new technologies disseminated	Completed	
Veterinary inspectors trained (see details under "EU Integration and Standards "section)	Completed	
At least 3 ToTs organized on EU standards	Completed	
Networking meetings between dairy cooperatives and associations organized	In progress	
Study tour to Slovenia for dairy cooperatives/associations	Completed	

FLOOD IMPACT

30%-40% decline in production in some areas

The immediate threat to agriculture from floods and storms has put animal welfare in the spotlight. Despite the fact that direct animal losses were not high (954 cows, per the FAO assessment), floods have destroyed cattle bedding and feed in flood-hit regions and submerged crops. The consequences are likely to be felt for months, if not years, in terms of lower production of crops, meat, and milk. The feed-deprived and shelterless animals have been stressed, compromising their immune systems. Even in the absence of contagious diseases,

immune-compromised and stressed animals produce less milk. This effect is further compounded by the poor quality and low availability of animal feed, which causes further production decline, since the nutritional balance of the feed is not adequate to sustain viable production. Some areas saw milk production decline by 30 percent to 40 percent in flood-affected area thus severely affecting the livelihoods of dairy farmers. However, the dairy industry itself has not been substantially affected as the overall milk production in the first seven months of 2014 has been higher than milk production over the same period in 2013, due to higher production prior to the floods. The project will continue its monitoring to provide a more reliable assessment of the effects of the floods on production of milk in both affected regions, and BiH as a whole.

IMPROVING HYGIENE AND MILK QUALITY AND REACHING EUSTANDARDS

EU Food Safety Standards

FARMA continued to organize training for producers across the country on various topics, such as proper milk production and good hygiene practice, bovine reproduction, proper feeding of cows, the Nitrates Directive on dairy farms, farm record keeping, and standards in milk production, in cooperation with local institutions, agencies, and organizations. The focus of these activities was to facilitate exports of BiH dairy products to EU.

For instance, over 200 farmers from Dubica, Prnjavor, Prijedor and Gradiška benefited from the training on a number of dairy production and herd management topics, which were organized in cooperation with the RS Ministry of Agriculture, "Mlijekoprodukt" dairy and local farmer associations. Additionally, the training on good hygiene practices, a proper animal feeding regimen, and on farm record keeping for dairy farmers from Grahovo was organized in cooperation with the Association of Agricultural Producers Grahovo. While a majority of these farmers are small producers, some of them supply large exporting dairies, thus they are on the list of farmers which export milk to the EU. Also, trainings for farmers from Sanski Most were organized within the scope of the program on development of sustainable agriculture - a program managed by the Union of Agricultural Associations Sanski Most - which includes development of rural tourism and improving marketing of agricultural products from this region.



Classroom training for farmers — primary dairy producers

Considering that implementation of EU standards requires both private and public sector cooperation, the project worked intensively with local institutions and authorities to help ensure compliance with EU requirements. For example, the USAID/Sida FARMA project and the BiH State Veterinary Office organized two, three-day seminars for veterinary inspectors on control of facilities designated for export of products of animal origin to the EU (October 2013). The aim of this training was to help ensure that the food control system is recognized by the EU and to assist implementation of the "EU Hygiene Package" legislation with an ultimate goal of enabling BiH producers to export milk to EU countries. Experts from the Veterinary Office of Slovenia conveyed their experiences to more than 30 BiH inspectors, who received detailed information about the national and EU-level regulations in this area. In addition, a simulated inspection was conducted in two dairy processing facilities and two dairy farms that supply milk to those processors. One seminar was held in Kozarska Dubica, with practical a simulation being held at "Mlijekoprodukt" dairy and "Arsenić" dairy farm. The practical simulation during the second seminar was held at "Zott" dairy in Gradačac and "Omičević" farm in Odžak.

In addition, training for veterinary inspectors and large milk producers on export of milk and milk products to the European Union was held in Banja Luka and Kozarska Dubica from

December 12-14, 2013, at the initiative of the RS Ministry of Agriculture, Forestry and Water Management. This training was organized in cooperation with the BiH State Veterinary Office and the Entity Ministers of Agriculture. Experts from the Republic of Serbia (which recently successfully fulfilled all the requirements for export of milk to the EU) were engaged with support of the USAID / Sida FARMA project.

The goal of this workshop was to prepare the veterinary inspectors and food producers for the arrival of the FVO (Food and Veterinary Organization) Mission in Bosnia and Herzegovina, (January 20, 2014). Serbian experts shared their experiences on the FVO Mission's requirements, with regard to milk quality regulations and its practical application; the conditions that the food producers must fulfill; and the activities that the veterinary inspections must perform to assess compliance with EU requirements. Practical exercises were held at the "Farmaland" dairy farm and in facilities of the "Mlijekoprodukt" dairy processor in Kozarska Dubica.

THE ROLE OF EU FVO6

The FVO works to assure effective control systems and to evaluate compliance with EU standards within the EU, and in third countries in relation to their exports to the EU. The FVO does this mainly by carrying out inspections in Member States and in third countries (BiH is a potential "third country") exporting to the EU.

Each year the FVO develops an inspection programme, identifying priority areas and countries for inspection. In order to ensure that the programme remains up to date and relevant, it is reviewed mid-year.

The findings of each inspection carried out under the programme are set out in an inspection report, together with conclusions and recommendations. The competent authority of the country visited is given the opportunity to comment on the reports at draft stage.

The FVO makes recommendations to the country's competent authority to deal with any shortcomings revealed during the inspections. The competent authority is requested to present an action plan to the FVO on how it intends to address any shortcomings. Together with other Commission services, the FVO evaluates this action plan and monitors its implementation through a number of follow-up activities. Where appropriate, it may highlight areas where the Commission may need to consider clarifying or amending legislation or areas where new legislation might be required. In this way, the results of FVO inspections contribute to the development of EU legislation. In addition, the FVO produces other reports, such as general overview reports that summarise the results of a series of inspections to a number of Member States on the same subject or the annual EU-wide pesticide residues monitoring reports.

Put simply, if the EU FVO's findings are positive, i.e. that the country's system of control of safety and quality of food products of animal origin is in compliance with that of the EU, the country may export such products to the common market. If the results of the FVO's inspection in BiH are positive, the country may export animal products (in this case, milk).

These efforts were supplemented by training programs for dairy farmers. For example, the FARMA project collaborated with the BiH State Veterinary Office, Entity Ministries of Agriculture, agricultural institutes, associations and cooperatives, as well as dairy processors, on efforts to prepare dairy farmers for the EU FVO inspection. Simulated FVO inspections were conducted in both Entities by a consultant from Slovenia, who brought many years of experience in conducting official FVO inspections in third countries. This activity was carried out with the aim of identifying and remedying defects noted during the

⁶ http://ec.europa.eu/food/fvo/how_en.htm

simulation, to help the management of dairies, farms, and competent authorities best prepare for the official FVO inspection. Additionally, the project specifically addressed the issues of proper feeding practices, early prevention and recognition of animal disease symptoms, and dairy herd management. Farmers and veterinarians enthusiastically embraced these efforts, and as a result significant improvements in the areas of record keeping and other requirements were noticeable. Unfortunately, despite noted improvements, the EU FVO inspection in January 2014, found deficiencies in the system of official control, hence putting export approval on hold until these deficiencies are rectified to EU FVO's satisfaction.





Veterinary inspectors practiced how to control dairy farms to ensure compliance with EU requirements

Despite this setback, USAID/Sida FARMA continued to support local institutions to help meet EU standards. Over 40 veterinary inspectors from Republika Srpska (RS) completed training on sampling of products of animal origin. The purpose of the training was to ensure implementation of EU procedures which are required within the scope of the National Residue Monitoring Program. Trainings were provided as part of the "Strengthening the capacity of veterinary laboratories and veterinary inspections in BiH" — program, implemented by USAID/Sida FARMA and the Czech Development Agency. The coaches included the RS Chief Veterinary Inspector, a representative of the RS Ministry of Agriculture, Forestry and Water Management, and four RS veterinary inspectors. The training was organized in collaboration with the BiH State Veterinary Office and the Department of Veterinary Inspections of the RS Ministry of Agriculture, Forestry and Water Management, at five locations in the RS. Veterinary inspectors from the Federation BiH had completed this training previously.

Encouragingly, the BiH Dairy Industry Association began to put pressure on official institutions to speed up the process to meet the EU requirements by organizing a meeting with the BiH State Veterinary Office (SVO), and BiH Ministry of Foreign Trade and Economic Relations (MOFTER). At the meeting, the Director of the BiH State Veterinary Office, Mr. Ljubomir Kalaba, presented an update on governmental actions to address the issues raised by the EU FVO report and expressed satisfaction with FARMA's involvement in the process.

Members of the Association expressed their satisfaction with Mr. Kalaba's efforts but also stated that the association members will keep pressuring the authorities to align the control systems with EU requirements until the export of milk is approved. The next steps, agreed to by participants are: to finalize the SVO's Action Plan; to prepare a codex regulating raw milk buyoff and improve milk quality; that SVO to engage more closely with larger dairy producers; and to establish closer relationships between SVO and producers with entity ministries of agriculture.





Good agricultural practices on farm training

In addition, the FARMA project (with subcontractor Megal Ptuj-Slovenia), in coordination with the RS Ministry of Agriculture, organized theoretical and practical training for milk producers on improvement of feeding practices, efficient use of pastures, and improved management of the dairy herd. The objective of the training was to ensure that farmers can optimize their yields while providing better quality animal feed that will help increase the quantity of milk produced as well as the milk fat and protein content. Two classroom training sessions and 10 practical trainings were held over a period of five days, with the participation of more than 100 dairy farmers and agricultural extension services staff.

Moreover, the BiH Association of Cheese Producers and the FARMA project organized practical training for dairy producers in the "Zlatna kap" agricultural cooperative in Tešanj, as a follow-up to theoretical training on improving the quality and hygiene of dairy products.





BiH dairy and cheese producers in Slovenia

The FARMA project also organized a study tour to Slovenia for cheese and dairy producers from BiH. Local producers had a chance to visit several Slovenian cheese producers who make different variety of cheeses, using varying technologies. Producers from BiH were introduced to new materials, equipment, and machines for cheese and milk production, feeding technologies that can improve cheese quality, and marketing practices.

EU Environmental standards: EU Nitrates Directive

In addition to helping farmers reach EU food standards, FARMA has also undertaken pioneering work to raise awareness about, and help facilitate the implementation of the EU Nitrates Directive.

The "Nitrates Directive 91/676/EEC" (a.k.a. *EU Nitrates Directive*) is particularly important from the viewpoint of agriculture and the EU Council Directive on the protection of waters against pollution caused by nitrates from agricultural sources. Implementation of the EU Nitrates Directive brings tangible environmental benefits in terms of protecting underground waters from pollution. At the same time, its implementation brings tangible benefits to farmers, for example, access to IPARD funds. All farms interested in applying for IPARD funds must be able to document that they implement the requirements of the EU Nitrates Directive. Many farmers from Slovenia and Croatia lost the opportunity to attain IPARD funding as they were not following the guidelines set by the Directive, or had failed to document that the requirements set in that document were in fact implemented on their farms.

Training-of-trainers for personnel from agricultural extension and inspection services was held on "Standards of Good Agricultural Practices (GAP) on Farms" in December 2013 in Tuzla. Training covered four GAP standards: environment, protection of animal and human health, animal welfare, and good agriculture conditions. The purpose of this activity was to develop a critical mass of educators/extension advisers who can train farmers and others, on ways how to minimize adverse environmental impacts from fertilizer and pesticide use in agriculture in line with EU requirements (and in compliance with USAID environmental requirements, notably the IEE, FARMA PEA and PERSUAP). The aim was to ensure that the farmers optimize their yields; and that their farms are meeting traceability requirements, while producing food and animal feed safe for consumption, with minimal adverse impact on the environment. Trainings continued over the course of January and February 2014.

This will promote optimization of yields and meeting the traceability requirements, while providing food and animal feed that is safe to consume and with minimal adverse impact on the environment. The training was designed for milk producers (interested in exporting of milk to the European Union), and companies successfully exporting fruits and vegetables to the EU. The presentations covered the new standards in agriculture in the EU which relate to the protection of human and animal health, and environmental protection.

Further, the Association of Agricultural Producers from Živinice organized training for dairy farmers (lecturer Ph.D. Stane Klemenčić from Slovenia) in collaboration with the FARMA project and the Agricultural Extension Service Tuzla. Farmers were educated about sources of water pollution from agricultural activities, and on the methods for reducing and preventing water pollution from agricultural sources in accordance with the EU Nitrates Directive requirements. FARMA organized a visit for the farmers to the OP "Sanel Omičević" dairy farm, where they were able to observe proper feeding practices, herd management techniques and how this farm implemented the EU Nitrates Directive requirements in practice. An additional training was held for the employees of the Agricultural Extension Service in Tuzla on the "Fast method for determination of levels of nitrogen in soil and plant leaf."

IMPROVING THE QUALITY AND VOLUME OF ON-FARM FORAGE AND QUANTITY OF MILK PRODUCED

FARMA and subcontractor Megal (Ptuj, Slovenia), in coordination with the RS Ministry of Agriculture, agricultural institutes from FBiH, and farmers' organizations, held several theoretical and practical trainings for milk producers on improvement of feeding practices, efficient use of pastures, and improved management of dairy herds. The aim of the training was to ensure that farmers can optimize their yields while providing better quality animal feed that will help increase the quantity of milk produced as well as the milk fat and protein content. Over 100 farmers and extension services personnel attended this 5-day training.

Further, the FARMA project and Megal organized a study tour to Slovenia for farmers from the flooded areas of Modriča, Šamac and Bratunac. During this study tour farmers had an opportunity to learn about different feeding practices, herd management, and hygiene practices. Also they were introduced to different feeding techniques that can help them to overcome problems with decreased milk quantity and quality caused by the floods. They visited the Agriculture Fair in Radgona, where the Slovenian subcontractor organized several presentations on agriculture equipment.

IMPROVING DAIRY HERD GENETICS

Since the issue of genetic composition of herds significantly affects both quality and quantity of milk, the project continued providing trainings in this domain. For example, 18 dairy farmers from Herzegovina completed the training on artificial insemination of dairy cows. Theoretical training was held in Gacko, while the practical training was held in Nevesinje on the "Planinsko dobro" dairy farm. Participants welcomed this effort, as this was the first training in artificial insemination of dairy cows ever held in the Herzegovina region.

IMPROVING RECORD KEEPING

To comply with EU standards and gain access to EU funding, Bosnia's farmers need to demonstrate sound farm record keeping skills. As such, during this reporting period FARMA conducted a series of trainings on farm record keeping.

WORKING WITH YOUTH

The project organized a training for dairy producers and cheese producers in cooperation with the Association of Cheese Producers in BiH in Fojnica. In total, 11 cheese producers and pupils from the Agriculture High School in Sarajevo attended this training. FARMA egaged Slovenian expert, Ms. Tumpej, who held a practical, hands-on training, allowing participants to try new methods and technologies first hand. After this training, the director of the Agriculture High School in Sarajevo extended an offer for future training to be held at the school facilities.

ASSISTING PRODUCER ORGANIZATIONS TO INCREASE PRODUCTION OF HIGHER VALUE PRODUCTS

FARMA and subcontractor Megal (Ptuj, Slovenia), in coordination with RS Ministry of Agriculture, municipalities Prnjavor and Teslić, agricultural cooperatives, and private firms, organized several theoretical and practical training sessions for cheese producers on the improvement of technologies, formulations, and development of cheese processing units in line with EU standards. During the practical training, a cheese tasting event was organized, where participants could bring their dairy products. The Teslić Women's Association presented their first cheese made in a cheese producing facility, equipped with the FAO's financial assistance and made operational with FARMA's technical assistance.





Training for women cheese producers in Ubosko village

The project also organized training for 16 cheese producers, mostly women from rural areas, in the village of Ubosko, near Ljubinje. During this training, Slovenian expert Ms. Majda Tumpej, presented production methods for yogurt, soft cheese and cheese spreads, and provided advice on how to improve production of traditional cheeses, such as sack cheese and semi-hard cheeses.

INTERNATIONAL PROMOTION OF LOCAL DAIRY PRODUCTS





Cheese from BiH attracted a lot of attention from Slovenian and regional attendees

The Association of Cheese Producers in Bosnia and Herzegovina, with support from the USAID/Sida FARMA project, presented selected products produced by their members at the 6th International Salon of wines and delicacies "VinDel 2013," held in Maribor (Slovenia). About 200 exhibitors from Slovenia and the region attended this fair. Professional buyers

from the HORECA system (hotels, restaurants, catering) also attended. Livno, Travnik and Tešanj cheeses attracted significant attention at the fair.

"We hope that the issue of export of BiH dairy products to the European Union will soon be resolved, so that BiH cheeses can be exported too. The quality of our cheese certainly warrants their presentation beyond local market" Mr. Omer Mrakić, President of the Association said after the Fair.





Scenes from "Balkan Cheese Festival"in Belgrade

The first Balkan Cheese Festival was held January 25-26, 2014 in Belgrade (Serbia). The aim of the Festival was to promote indigenous cheeses and the importance of preservation of traditional food products. FARMA organized a very successful presentation by five cheese producers from Bosnia and Herzegovina (ZZ Eko Vlašić, Travnik, Eko Sir Puđa, Livno, OPZ Zlatna kap, Tešanj, ZZ Promilk, Prozor/Rama, and ZZ Livač, Banja Luka). In addition to BiH cheeses, the Festival also showcased cheeses made in Serbia and Montenegro. Visitors were very satisfied with quality of BiH cheeses, and our producers made a number of business contacts with Serbian food distributors and interested restaurant operators from Belgrade.



USAID BiH Mission officials visit "Eko Vlašić" cooperative

In addition, the "Eko Vlašić" cooperative, (a FARMA beneficiary), made their first venture into international markets. "Eko Vlašić" took a leading role in the establishment of a state-level association of cheese producers, and that increased their annual cheese production by 269 percent (from 16 tons to 59 tons) between 2009 and the end of 2013 with project support in improving production and marketing. Eyeing business opportunities abroad, the cooperative ventured into business with Edexfood - one of the leading distributors of food products from the Western Balkans in the EU - to produce traditional cheese and cheese spreads under the cooperative's brand "Katun" in Holland. Edex Group will provide facilities and the

cooperative will lend its brand and recipes for the production of "Vlašić" cheese almost 1,400 km away from the Vlašić mountain.

DOMESTIC PROMOTION OF LOCAL DAIRY PRODUCTS

The Association of Cheese Producers in Bosnia and Herzegovina also organized the promotion of local gourmet cheeses at the Sarajevo Holiday Market with FARMA support. The highlight was the cheese tasting event on December 20, 2013, which was attended by the representatives of hotels and restaurants in Sarajevo, media, and donor organizations (USAID, SIDA and CzDA).

Famous BiH chef, Muamer Kurtagić, presented ten selected cheeses to the guests; shared tips and recipes for serving and creating dishes with Livno and Travnik cheese, Banja Luka Trappist cheese, Herzegovina sack cheese, Tešanjski cheese, Prozorski cheese, and other gourmet cheeses from BiH. The new Catalog of BiH Cheese Producers produced with FARMA's assistance (click link to download⁷) was showcased at this event. This publication includes in-depth information about products made by 14 members of the Association of Cheese Producers in BiH.





USAID BiH Mission Director, David Barth, and Sida BiH Director, Pelle Person with chef Kurtagić (photo left) and the best traditional cheese in Bosnia and Hezegovina (photo right)

The best cheeses in two categories - traditional cheeses and new cheeses - were selected based on the survey results of visitors and customers at the Sarajevo Holiday Market. The winning title in the "traditional cheese" category went to Trappist cheese, made in the Marija Zvijezda monastery in Banja Luka. The visitors chose Tešanjski cheese with nettle as the best new cheese in BiH.

Awards were presented by the USAID BiH Mission Director, David Barth, and Sida BiH Director, Pelle Person. USAID and Sida supported standardization and improvement in hygienic practices in traditional cheese production facilities, along with development of new types of cheeses over the past four years, through the FARMA project.

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⁷ Alternatively, copy the following link in your browser: http://www.bosniafarma.ba/en/documents/cheese-catalogue/ to view and download this publication.

MEDICINAL AND AROMATIC PLANTS (MAPS) & HONEY

The primary objectives in this sector include: (1) expanding cultivation of medicinal and aromatic plants (MAPs); (2) moving towards higher value products; (3) bringing the MAPs and honey sector up to EU standards and (4) improving marketing.

BACKGROUND

The MAP sector is a rare sector in BiH where exports exceed imports. For instance, in 2013, exports from this sector exceeded imports by a factor of three. According to USAID/Sida FARMA and BiH FTC analysis, producers and processors from this sector exported 28.65 million KM (about US\$20.29 million) worth of products, while at the same time, imports amounted to 9.36 million KM (about US\$6.63 million). Overall, the value of export of MAPs and honey products increased by 74 percent between 2009 and the end of 2013.

Over the past few years, the focus has been on development of semi-final, or final products (high value-added) and cultivation of the medicinal and aromatic plants in order to maximize profitability and to preserve local biodiversity. For example, the value of exports of essential oils (a semi-final product) increased in the period 2009-2013 by 200 percent, exceeding the value of imports by a factor of four in 2013 alone.

Moreover, a large number of rural women from throughout BiH have begun cultivation of MAPs and beekeeping, as a result of FARMA assistance. About 400 women have participated in training programs through four MAPs cultivation and beekeeping schools. Production of MAPs and honey enables them to attain both gainful work and a new source of income.

ANNUAL HIGHLIGHTS

- Annual meeting of the MAP producers and processors held.
- Four MAP cultivation school's programs completed (three implemented by Women for Women International; one by ACED). A total of 380 rural women from throughout BiH are now educated in cultivation of MAPs, and 72 of them are now actively involved in cultivation and processing of MAPs, from which they derive new income. A total of 6.84 hectares of new parcels are cultivated with MAPs (e.g. mint, melissa, marigold, basil, lavender, thyme, etc.).
- The contracts for implementation of two new "MAP Basic Cultivation Schools" to train an additional 200 women from central and western Bosnia and Herzegovina was signed with Women for Women International and ACED. The schools will last from December 2013 – November 2014.
- The contracts for implementation of the project "Support to creation of women's entrepreneurship in rural areas through MAP cultivation and processing" was signed with ACED Banja Luka and with Women for Women International.
- USAID/Sida FARMA initiated a project "System for monitoring bee pastures (secretion of nectar) with a web portal for real-time data presentation." The project is a result of the original idea of a young beekeeper, Mr. Emir Memišević, from Sarajevo and grant support from FARMA. The project will enable beekeepers to track the beginning of the blooming season of honey plants and their nectar secretion on 100 locations throughout BiH throughout the year.
- USAID/Sida FARMA and the Chamber of Commerce of Republika Srpska organized a round table discussion on "Production of medicinal and aromatic herbs as a generator of employment."
- A pocket publication on sustainable MAP collection for 86 medicinal plants and 10 varieties of mushrooms, and the Calendar for MAP Collection were developed by FARMA.

 A round table on "Immortelle in Bosnia and Herzegovina" was held in cooperation with the BiH Foreign Trade Chamber.

SECTORAL DEVELOPMENTS

Continued sectoral growth is encouraging.

Overall sectoral results were very impressive, given difficulties which impacted agriculture severely. The value of sales of the project beneficiaries grew over the year, to reach an estimated 4 percent growth YOY (78 percent LOP growth). Increase in value of sales should come as no surprise when we talk about the MAPs/Honey. The smallest of the three sectors in terms of value of production, it nevertheless proved able to achieve impressive growth.

This year's growth was spurred by the increasing production and collection of mushrooms from the wild. Rain, which decimated some other cultures, benefitted mushrooms, and the beneficiaries capitalized on significantly higher quantity of raw material. In addition, the essential oils producers continued to grow, increasing their production and investing in development of cultivated medicinal and aromatic plants plantations.

Unfortunately, more impressive growth in this sector had been hampered by lower production of honey and lower yield of some plants. The high precipitation which characterizes this season will have an effect on honey yield, due to lack of food. Bad weather prevents honey bees in many areas from collecting nectar. The frequent rains throughout the country prevented honey bees from foraging on crops, thus affecting production of honey negatively.

Additionally, production of honey had been severely impacted by the floods, despite the fact that majority of FARMA's beneficiaries do not reside in the flood-affected regions. Those that do, however, experienced significant losses as the beehives were destroyed and the bee population lost. For instance, about 3,000 beehives had been destroyed in Republika Srpska (est. damage of about BAM 1 million), while no official data had been available for the Federation BiH at the moment of development of this report.

The positive balance of trade in MAP/Honey sector by now became a norm for this sector. This sector surpassed the level of exports attained in the first six months of 2013 by 19 percent YOY (BiH Foreign Trade Chamber), owing to growth in export of dried mushrooms and essential oils. This general trend was being followed by the FARMA beneficiaries. It is estimated that the 2014 growth in the value of exports will equal 14 percent for an LOP increase of 160 percent! For more details about sectoral developments, accomplishments of the FARMA beneficiaries, and project results, please read the remainder of this section.

YEAR 5 MILESTONES		
Milestones	Status	Explanation
The MAP Companies Catalogue translated into Turkish, and contacts with international buyers facilitated for at least three (3) MAP companies	Completed	
At least four promotional events organized and at least 40 farmers linked with local POs	Completed	
5 POs attended trainings on business planning / filing loan applications	Completed	
At least 10 POs attended events aimed to disseminate information on new financial products that could be attractive to POs (e.g. subsidies, agriculture insurance, "angel"investors, factoring, etc.)	Completed	
At least one PO accessed FDI (from any one of the sectors)	Completed	
At least 50 new farmers successfully cultivating MAPs and at least 200 collectors trained. Training materials on sustainable wild collection and GACP developed	Completed	

At least 3 new farmers interested in cultivating immortelle, and public event ("Days of Immortelle") organized.	Completed	
At least 5 MAPs and Honey POs improved their packaging/design/promotion materials	Completed	
YEAR 5 MILESTONES		
Milestones	Status	Explanation
Up to 5 MAP and Honey POs trained in online marketing	Completed	
Up to 5 MAP and honey POs developed/updated website.	Completed	
At least 5 POs supported in promotion efforts	Completed	
Study tour organized and at least five companies adopted Good Practices in Cultivation/Processing	Completed	
At least one PO improves its technology; technologically improved products are at the market	Completed	
At least 2 local study tours organized	Completed	
One MAP basic cultivation school organized, and at least seven women successfully cultivating MAPs.	Completed	
At least 10 women successfully cultivating and processing MAPs on commercial basis	Completed	
Up to 5 POs successfully applying for grant funds	Completed	
All grantees publicly presented their achievements and results; donors informed, PR materials developed and published in media.	Completed	
At least two POs successfully obtained a certificate related to international standards	Completed	
Round table organized and POs informed/ updated on the actual EU legislation	Completed	

FLOOD IMPACT

Direct losses recorded, but not to the extent experienced in other sectors The MAPs/Honey sector is unique in that most of the raw material is extracted from the wild. As such, this subsector was not affected by the recent floods to the same degree as other sectors were. However, some losses did occur. Some seeds and planting material were lost (destroyed partly or totally), for example at some demonstration parcels handled by women from MAP Schools, and (to a lesser extent) at some producer-partner organizations (POs) or their cooperants.

The honey subsector has not been affected as much as the other sectors but damages in some localities were very significant. While the majority of honey producers reside in regions which were, by and large, unaffected by the floods or landslides (in Herzegovina and northwestern parts of BiH), in some affected areas, there was destruction of beehives and a resulting loss of the bee population. For instance, about 3,000 beehives were destroyed in Republika Srpska and more than 1,000 in the Federation BiH, resulting in total damages of about 1 million KM. The high precipitation which characterizes this season will also have an effect on honey yield, due to lack of food. Bad weather prevents honey bees in many areas from collecting nectar. The frequent rains prevented honey bees from foraging on crops, thus affecting production of honey negatively.

EXPANDING CULTIVATION AND IMPROVING THE PROCESSING OF MEDICINAL AND AROMATIC PLANTS (MAPs)

Production of medicinal plants is a promising agricultural activity. This is the area where the country records a positive trade balance, with exports of herbs and forest plants reaching BAM 28 million (roughly US\$ 19 million) in 2013. The latest assessment by FARMA indicates that the cultivated medicinal plants areas are increasing with around 600 hectares planted with various types of plants, with chamomile being the most dominant plant.

USAID/Sida FARMA has been funding ongoing implementation of four Schools to support women's entrepreneurship through MAP cultivation, MAP processing, and beekeeping for women in Bosnia and Herzegovina. The goal of these schools was to provide theoretical and practical training for at least 400 women from rural areas in the cultivation of medicinal and aromatic plants and beekeeping, with the goal of encouraging them to engage in commercial production.





MAP School participants in practical training

These programs were implemented by "ACED" (Banja Luka) and the NGO "Women for Women International" (Sarajevo), the local companies that partnered with FARMA in building the capacity of women as well as building their own capacity in project implementation. The participants had already been linked to markets, so they can become independent producers who generate income for their families.

One of the project beneficiaries, Mrs. Hanka Džebo, who participated in the MAP School organized by Women for Women International, established a plantation of medicinal and aromatic plants over half a hectare. She and her family are now planning to construct a drying facility and engage full-time in MAP production.

MAP SCHOOLS HIGHLIGHTS

After completion of four MAP cultivations schools (three implemented by Women for Women International, and one by ACED), the following results have been achieved:

- 380 rural women from entire country are now educated in the cultivation of MAPs;
- Currently, **72** of them are now actively involved in the cultivation and processing of MAPs, from which they derive new income;
- Each woman involved earned between **EUR 700 and 4,500** (depending on the size of the cultivated plot and yield attained) during the school program, as all the MAPs produced were sold;
- New parcels totaling **6.84** hectares of land are cultivated with MAPs (e.g. mint, melissa, marigold, basil, lavender, thyme, etc.) as of the end of the quarter.

Activities in this domain continued throughout the year with commencement of the "Support to creation of women entrepreneurship in rural areas through beekeeping combined with MAPs cultivation" program for 40 women. Participants in this program were graduates of earlier MAP Schools who now plan to increase their MAP cultivation, and add beekeeping and honey production. This project is being implemented in Doboj, Tešanj, Vitez, and Jablanica, despite significant flood damages to infrastructure in some of these municipalities (primarily in Doboj). Nevertheless, the attendees expanded their plots under cultivation, and receive three beehives which were placed in a number of locations to start the production of honey while intensive practical and theoretical training continued.





Scenes from practical training at MAP Cultivation Schools



In addition to these efforts, two local experts have been conducting practical training in the field, for farmers interested in MAP cultivation, and as a result of this effort, an additional 49.6 hectares of MAPs were planted.

BRINGING THE MAPS AND HONEY SECTOR TO EU STANDARDS

An annual meeting of producers and processors of medicinal and aromatic plants (MAPs) and forest fruits was held in November 2013 at the Foreign Trade Chamber of Bosnia and Herzegovina (BiH FTC). Over 30 companies from throughout the country attended the meeting at which Ministries of Agriculture of both Entities, Public Enterprise "Republika Srpska Forests" (JP Šume RS), commercial lenders, and the donor organizations presented sectoral results and developments.

Further discussions on the current status and implementation of legislation on non-wood forest products (NWFP) were held with the Ministries of Agriculture, Forestry and Water management from both Entities. Each Ministry of Agriculture clarified the status of legislation pertaining to non-timber forest products. Since almost 75 percent of exports from this sector are mushrooms and forest fruits, it is important to develop an appropriate legislative framework within which the firms and collectors operating in this sector would operate.

In addition, BiH FTC and FARMA held a joint presentation to showcase all the activities the two organizations completed in 2013, which promoted domestic exports. These activities included supporting local producers' attendance at fairs in Germany, Turkey, and Sweden, along with development and distribution of the MAP sectoral catalog in English, German, and Turkish. The attendees were also informed about the DCA Guarantee Facility (within the USAID/Sida FARMA project framework) as well as the "business angels" financing concept, which was presented by BIZOO Angels. Representative of the Kingdom of Sweden Embassy of BiH also provided information and details on the "Challenge fund", through which companies may attain grants of up to 30,000 EUR.

Additionally, the FARMA project plans to provide additional technical support on the implementation of the HACCP principles and other EU requirements in the production of honey in cooperation with the Czech Development Agency. Training for BiH producers will be held by the Czech expert who will visit Apimed in Sanski Most, PZ Zalfija and Herzeg Med in Trebinje, and Medicom in Grude. Further, FARMA plans to organize a round table for potential honey exporters on export procedures and requirements, in collaboration with the BiH State Veterinary Office and an expert from the Czech Republic. The round table will be organized after the training and field visits of the expert.





2013 Natural Products of Scandinavia Fair

IMPROVING MARKETING OF MAP/HONEY PRODUCTS

With support from the USAID/Sida FARMA project, seven BiH companies had the opportunity to attend (as visitors) the Natural Products Scandinavia 2013 trade fair in Malmö, Sweden, October 20 – 21, 2013. At the same time in the same location, the organizers held the Nordic Organic Food fair. Attending local companies involved in production of MAPs, berries, and honey have exported to EU markets previously, but none had contacts in Scandinavia. "Andjelić" (Trebinje), "Arome" (Mostar), "Elmar Aroma Care" (Bileća), "Halilović" (Sarajevo), "Šumski plod" (Prozor), "RS Association of Beekeepers," and "Agency for Cooperation, Education and Development" (ACED) from Banja Luka, had a chance to learn more about the trends in the natural cosmetics market and the popular ingredients that could be produced or cultivated locally.

INTERNATIONAL MARKETABILITY OF BIH HONEY- Learning & Improving

Attending international fairs brought both commercial and learning opportunities for domestic producers. For example, local products presented at the Nordic Organic Food fair in Malmo (Sweden) sparked the interest of an English company "Ogilvy's" which specializes in distribution of specialty

honeys to the UK (the company already sells "Balkan Linden "and "Balkan Acacia" monofloral⁸ honeys from Serbia). The Catalogue of products and some samples were provided to "Ogilvy's" at the fair, and additional samples were sent to the UK. As a result, "Ogilvy's" came back with a request for **140 tons** of organic poly-floral honey to be supplied on an annual basis. Unfortunately, only "Apimed" can provide more sizable quantities (up to 5 tons) at this moment, which is not sufficient to satisfy the customer's request, so "Ogilvy's" decided not to place any orders at this time. Despite this, the owner of "Ogilvy's" showed an interest in visiting BiH in late 2014, which further proves that BiH specialty honeys may find there place in international markets once production expands.

Our producers must work hard to increase their production, improve their marketing skills, and implement relevant quality standards. These are the areas in which FARMA works continuously in order to assist the project's beneficiaries to improve their production.

The visit to the fair was a success, with over 60 contacts established which have the potential to grow into business relations in the future. Some potential buyers are even considering visiting BiH and meeting the producers here, while others requested additional samples and price quotations from domestic producers and processors. USAID/Sida FARMA has started organizing a joint exhibition of local companies for this year's Nordic Organic Food Fair, in coordination with the BiH Foreign Trade Chamber.

In addition, the project's beneficiaries supported USAID's booth at the Sarajevo Diplomatic Bazaar held on December 8, 2013. Eight beneficiaries from the MAP/honey sector (out of 17 FARMA beneficiaries) donated their products for sale at this event, as all proceeds went to local charities.

USAID/Sida FARMA, in coordination with the Chamber of Commerce of Republika Srpska, organized a round table discussion on "Production of medicinal and aromatic herbs as a generator of employment" in Banja Luka on 15 May 2014. Participants concluded that this sector offers growth opportunities. Round table participants observed that the market potential, especially in foreign markets had been growing, as indicated by the year-on-year export growth trend (in 2013, exports from this sector amounted to BAM 28 million).

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⁸ Monofloral honey is a type of honey which is valued because it has a distinctive flavor or other attributes due to its being predominantly from the nectar of one plant species.



A small beekeeper proudly presents her beekeeper certificate at the Kids Fest in Sarajevo

This sector offers ample opportunities for networking and involvement of a large number of farmers and collectors. Some positive examples of this are provided by Prirodno bilje in Banja Luka and the AgroMAP Network. Moreover, projects implemented by the NGOs ACED Banja Luka and Women for Women International Sarajevo in collaboration with USAID/Sida FARMA, provide a showcase of how rural population segments (especially women), can be encouraged to start cultivation of medicinal and aromatic herbs. The round table concluded that greater support of both local communities and Entities is necessary in order to strengthen this sector.

In cooperation with the BiH Foreign Trade Chamber, FARMA organized a round table on the topic "Immortelle in Bosnia and Herzegovina". The event was attended by growers, buyers, and processors, representatives of the FBiH Ministry of Agriculture, Water and Forestry, and Agro-Mediterranean Institute of Mostar. Immortelle is a plant indigenous to Herzegovina, for which the demand in the world market is large. For this reason, immortelle is increasingly harvested from the wild, even before it has reached its technological maturity. It is estimated that processors annually buy between 600 T and 700 T of immortelle from the wild. If uncontrolled harvesting from nature continues, it will lead to extinction of immortelle. Therefore, there is a need for cultivation of immortelle of a quality comparable to the quality of the wild plant.

Immortelle is being cultivated currently on about 40 hectares in Herzegovina. This is not enough to meet the needs of the market, but it is encouraging to note that more and more people are interested in its cultivation as it will result in the protection of natural habitat. Immortelle may become an export brand for Herzegovina, if it is cultivated on large areas and under strict ecological principles. The key message of this event for the Ministries of Agriculture of both Entities was the necessity to develop a special program to support

cultivation of immortelle, considering that the preparation of the land for its cultivation is costly. (A short movie on immortelle in Herzegovina was made by the FARMA staff, and is available at

https://www.youtube.com/watch?v=iR7NXReeasA)

In addition, the USAID/Sida FARMA project took part in the Happy Day at Sarajevo Kids Festival, to teach children about agricultural production through several interesting activities. At the booth with natural cosmetics, kids were making natural soaps and gifts, and they learned about the importance of hygiene, especially hand washing. The booth with bees, where children could see the worker bees and the queen behind glass-casing, were particularly interesting and well-attended. Happy Day at the Kids Festival was supported by USAID Bosnia and Herzegovina, and two MAP POs, Matična mliječ Memišević (beekeeping) and AlmaDerm (natural cosmetics), took part in the Happy Day activities.

INNOVATIONS AND INITIATIVES

Real-time monitoring of bee pastures



Emir Memišević, an IT tech who became a beekeeper at work in his apiary. This 31-year-old native of Sarajevo decided to supplement his income by beekeeping, eventually turning the hobby into a full-time job. He is now one of the largest producers of Royal Jelly in BiH. More information about his business can be found at http://www.mmm.ba/. (Photo credits: NAP)

USAID/Sida **FARMA** is implementing a "System for pastures monitorina bee (secretion of nectar) with a web portal for real-time data presentation." The project is a result of the original idea of a young beekeeper, Mr. Emir Memišević from Sarajevo (photo left). The project is supported by FARMA grants. project. The which scheduled to be completed by the end of October 2014, will enable beekeepers to track the beginning of the blooming season of honey plants and their nectar secretion at 100 BiH locations throughout the year.

A dedicated web portal, www.medobar.com, will enable monitoring at all 100 locations, and the data will be updated twice a day. In this way, beekeepers will be able to better plan when and where to move their bees to use natural resources to the maximum extent possible and to attain high yields of the best-quality honey.

This project has several objectives: to train at least 100 young beekeepers on good practices in beekeeping, to instruct them on the benefits of mobile beekeeping (moving the beehives to best possible pastures), and to collect data on the impact of weather conditions on the process of nectar secretion. The data collected will be available to masters' and doctoral studies candidates free of charge.

Importance of bee pollination

The project "Increasing awareness of the importance of bee pollination among beekeepers and fruit growers with an aim to protect bees from pesticide application, and increase yields in honey and fruit production" expanded in 2014 to include 10 additional municipalities — Čelić, Goražde, Prozor/Rama, Bugojno, Čapljina, Gradačac, Bratunac, Mostar, Ravno (including Trebinje and Ljubinje), and Butmir (with demo plots at the Federal Institute of Agriculture) — with "Košnica" company from Gradiška. More than 450 fruit growers and beekeepers attended information sessions. This project involves theoretical and practical training workshops. Emphasis is placed on the need for beekeepers and fruit growers to work together with a common goal of preserving the bees while increasing fruit yields — a win-win proposition for both groups of agricultural producers.

Theoretic trainings have been completed, and practical training is in the final stage. During practical training, demo plots were established, and testing of fruit productivity (bee-pollinated vs. non-bee pollinated plant) was completed. The bee-pollinated fruit plants have higher yields of higher-quality fruits. For instance, bee-pollinated cherries in Čapljina test-orchard gave 22% higher yield that the control (non-bee pollinated plants). The bee-pollinated raspberries have 55% higher yields than the control group. Yet, testing for some fruit cultures (e.g., pears) was inconclusive due to poor weather conditions (frost) on site, which prevented bee activity.



Immortelle seedling on new plantation in Herzegovina. The inhospitable land this part of the country is uniquely suited for production of medicinal and aromatic plants, which thrive in hot climates with low precipitation.



BEEKEEPING WILL SOON BE A SERIOUS BUSINESS FOR CERTIFIED WOMEN

"The project "Support to creation of women entrepreneurship in rural areas through beekeeping combined with MAPs cultivation" trained forty (40) women who completed a MAP Cultivation School. These women were successful in cultivating and producing lemon balm, marigold, mint, basil, valerian and sage on a roughly 50 dunum surface (about 5 ha). The project engaged women from four rural communities from municipalities of: Jablanica, Vitez, Tešanj and Doboj East." said Ms. Dajra Čano, the Program Coordinator of the organization Women for Women International.

With financial support from the FARMA project- agricultural development project financed by the governments of the United States and Sweden- and with support of Vitez and Tešanj municipal authorities, two drying kilns were procured and installed. This improved the seasonal utilization of raw materials and boosted productivity. This project is a continuation of these efforts, aimed at further improving the livelihoods of women from these areas.

Ms. Čano pointed out that each woman was provided with superb training in beekeeping, adding that each participant received three beehives and the beekeeping equipment needed to get started in this business activity, free-of-charge.

"They will engage in serious business next season. We think that this was the first group of women in BiH that was ever officially trained in proper beekeeping. We certainly hope that by next season, the beekeeping and production of honey will become a significant source of income for these newly-minted entrepreneurs." said Ms. Čano.

(source: Radio Sarajevo and FENA News Agency)

FRUIT AND VEGETABLES (F&V)

To achieve FARMA's goals, the project concentrated its activities in three segments: (1) introducing new production technologies and standards in production and processing; (2) introducing new berry varieties to ensure the sector gains a competitive advantage in the long run; (3) f acilitating market linkages, through participation in fairs and direct contacts with potential buyers, to help POs access higher paying markets.

BACKGROUND

Over the past few years, the production of "staple" items (e.g., apples, potatoes, pears, etc.) has remained relatively stable, while the production of fresh fruits —especially berries — has increased significantly as a result of FARMA's early investments in expansion and improvement in cold chains and post-harvest management. Fresh produce (especially fruits) are in high demand by international markets, and it is no surprise that export of fresh fruits has been increasing along with production.

Unfortunately, intense rains and floods resulted in outbreaks of plant diseases in many species (including apples, pears, and plums), resulting in significantly diminished yields. For example, 2014 yields were only one-third of those in 2013 in Central and North-East Bosnia. As a result, we expect to see a reduced value of exports.

At the same time, production of berry fruits, especially raspberries (both fresh and for processing) increased, despite poor weather conditions. Even at the Zeljezno Polje locale, which was largely devastated by floods and landslides, farmers managed to produce and sell more than 600 MT of raspberries, at average price of BAM 3 per kilogram (thus earning roughly BAM 1.8 million— an exceptionally important accomplishment for the community devastated by the floods). Moreover, the demand for fresh raspberries has been as high as ever this year. The retail price reached BAM 10 per kilogram (packaged in 250 grams boxes). Demand for American High Bush blueberries has been exceptional too. It is estimated that 70 -80 MT were sold — mostly in foreign markets — at average wholesale price of BAM 8-9 per kilogram.

Farmers have recognized the potential of berry cultivation, and more hectares are being planted with berry fruits than ever before. This sector has gained an unstoppable momentum. The FARMA project's contribution to the development of the sector has been significant and includes theoretical and practical training programs, introduction of new varieties and new production technologies, connecting farmers to markets, and assisting producers to gain access to foreign markets. Together, these activities have resulted in increased quality and production volumes while using sophisticated and modern production technologies. The record-breaking increase in production volumes and value of sales in this sector proves the importance of continued investments into sectoral development and the importance of assistance to primary producers, due to the vast and yet barely tapped economic potential of berry fruit production in BiH.

ANNUAL HIGHLIGHTS

- A series of trainings were conducted across the country, in an effort to ensure application of proper production techniques during the winter hibernation period.
- Six companies from the fruit and vegetable subsector had B2B meetings in April with buyers of fresh fruits and vegetables from Gothenburg, Sweden.
- 400 berry seedlings were distributed to the extension service in Sokolac to establish a demonstration plot of new berry varieties in this region.
- Technical trainings were conducted across the country, focused on post-flood recovery of crops in affected regions.

SECTORAL DEVELOPMENTS

Growth in sales of the project's beneficiaries operating in this sector is a testament of ingenuity and resilience of local farmers. One must remember that this sector suffered the most from inclement weather throughout the life-of-project. Floods in 2010 severely affected production in some regions of the country. A double-punch of extreme snowfalls and severe drought in one year (2012) reduced production significantly, even forcing some FARMA beneficiaries into bankruptcy. The production was just recovering over the period of 2013 into 2014, just to be negatively impacted again by the floods.

Hence, it is a small miracle that the beneficiaries in this sector managed to increase the value of sales by an estimated 2 percent (16 percent LOP growth). This year's modest growth was maintained by repositioning in domestic market, caused by excess in European supply and resulting lower prices of fruit and vegetable commodities (a result of the sanctions of EU on Russia).

By all accounts, more products from this sector find its way into domestic markets too. The import of fruit and vegetable products in period Jan-Jun 2014 declined by 11 percent in relation to period Jan-Jun 2013. Coupled with overall 21 percent increase in exports over the period in period Jan-Jun 2014 (in relation to same period of 2013), decline in import contributed to a slight increase in overall value of sales of the beneficiaries. The growth rates differ significantly between plant cultures.

The export of frozen raspberries increased by almost BAM 5 million (65 percent increase in the first six months of 2014, in relation to same period in last year). Export of apples grew by 225 percent (from BAM 0.8 million in first six months of 2013 to BAM 2.6 million in the same period of 2014). On the other hand, export of potatoes declined significantly- by 61 percent. The FARMA's beneficiaries estimate a decline in exports of 4 percent (51 percent LOP growth), which, when considered in combination with sales results indicate that the growth was primarily attained by domestic repositioning.

One of the reasons for this resilience is that a number of producer and processors were able to store excess fruit and vegetable (capitalizing on the improvement in the cold chains and post-harvest management) produced in 2013 season, hence creating a cushion, which absorbed the most severe blow to production delivered by the floods and generally poor season. Unfortunately, while these improvements served the sector overall, most of the FARMA's beneficiaries in flood-affected regions will need extra-assistance to restore production to pre-flood level.

YEAR 5 MILESTONES			
Milestones	Status	Explanation	
Established business relationships and sales contracts signed	Completed		
Improved branding, packaging, etc., for at least 5 POs	Completed		
At least 20 POs attending presentations on the DCA facility	Completed		
At least 10 POs attending trainings on business planning/filling loan application	Completed		
At least one PO accessed FDI (from any one of the sectors)	Completed		
Implemented the latest growing technology, which results in increased productivity (higher yields) and better product quality, etc.	Completed		
Increased awareness of farmers, and recently introduced berry varieties disseminated and planted	Completed		
Training materials disseminated to farmer groups	Completed		
POs are implementing relevant standards	Completed		
Two trainings for coops and two for associations on relevant standards	Completed		

FLOOD IMPACT

6,000 hectares destroyed; damage exceeds BAM 70 million

Per FAO estimates, more than 6,000 hectares of production under fruit and vegetables were destroyed during the floods. Total damages exceed BAM 70 million. To provide an illustration of the significance of this damage, this is equal to 2/3 of the total sales attained by the FARMA beneficiaries in 2013. In areas where the water remained for more than two days at levels varying between 0.5 and 8 meters, there was complete loss of annual crops and, in some cases, orchards. Revitalization and recovery of plantations will be essential, although it will take at least 2 to 3 years to recover to predisaster production capacity levels.

INTRODUCING NEW PRODUCTION TECHNOLOGIES AND STANDARDS IN PRODUCTION AND PROCESSING

Technical trainings were provided to berry producers throughout the year on a variety of topics, including proper growing of fruit and vegetables, production standards, plant protection, irrigation, fertilization, and production in protected areas. Trainings were usually conducted with local organizations. For example, FARMA trained 23 members of the women's organizations "Maja" and "Žena" in the Bratunac area on proper raspberry growing technology, including plant protection, irrigation, and fertilization, in a continued collaboration with the RS Ministry of Agriculture and RS Extension Services. This training program was also replicated for other growers in Višegrad, Bosanski Šamac, and Prud. Since farmers in Samac and Prud do not have any experience in berry production, the project wanted to present the market potential and the requirements for successful production of berries. The project also collaborated with municipal government to organize technical training on pruning techniques for 59 berry farmers from Kakani on a berry demo plot at Butmir. Additionally, the project organized technical trainings for raspberry and strawberry producers in Novi Grad, Bužim, and Cazin in collaboration with local agricultural cooperatives, commercial producers, and the Agricultural Institute in Bihać. More than 250 berry farmers from these three municipalities attended the trainings.

Technical training, new production technologies, and results

Since the May 2014 floods, the project has provided technical assistance in flood recovery for fruit and vegetable growers and agricultural organizations around the country. For example, technical assistance in dealing with the effects of floods and inclement weather on vegetable production in greenhouses and open fields was provided to producers from the Bratunac/Srebrenica region by the FARMA's short-term technical expert Dr. Omer Kurtović in June 2014. In addition, the same type of assistance was provided to berry growers in this region by FARMA's short-term technical expert Mr. Adnan Maličević. These activities were conducted in cooperation with the EU-funded project implemented by Care International and Regional Advisory Service in Bratunac.

Technical assistance for berry farmers from northeastern BiH was organized in cooperation with the Agriculture Cooperative Gračanka (Gračanica). Project personnel visited farmers, especially those who suffered flood damage, and provided hands-on technical assistance to berry growers in Tuzla and Čelić municipalities. FARMA also participated in a meeting of the Assembly of the Association of Seedling Producers in FBiH at which the damages caused by floods and landslides, and what the members can do in the short term to mitigate the consequences, were discussed. Several members of this Association suffered losses due to flood or landslides (for instance Voćni rasadnik, Srebrenik).

In response to the floods, the cooperative Bios (a FARMA beneficiary), in cooperation with the Visoko Municipality, organized a live TV show on how to mitigate damage to fruit and vegetable production. The project also organized a field visit to affected regions for representatives of the U.S. Embassy and USDA, in order to collect information about the damage and organize potential assistance.





Destroyed strawberries in Čelić (left photo.) FARMA staff voluntarily pooled funds to procure a generator and fuel for the people in Željezno Polje, which was severely affected by landslides. Despite the severe damage to affected farmers, overall raspberry production from Zeljezno Polje ended the year strongly due to high yields from existing plantations and the relatively high price of raspberries. This is having an extremely positive effect on the village, and other farming communities where raspberry production dominates (right photo).

FARMA also continued its other usual training activities. FARMA organized a number of incountry study tours for tree fruit and berry producers from various parts of the country to provide hands-on technical training on new growing technologies. For example, berry producers from Maglaj and Novi Šeher visited the berry orchards of Ms. Amra Ugarak and Mr. Muhamed Ćeso in Bugojno. In addition, they had an opportunity to visit Heko's fruit nursery and berry processing facility. The project also organized an in-country study tour to tree fruit orchards in Srebrenik and Gradačac for 56 students from the Agricultural Faculty from Tuzla. The aim was to provide practical training in soil science, including analysis of soil quality and structure and proper soil sampling techniques. During the tour, practical education was organized on four farms and in tree fruit orchards, and in "Voćni rasadnik d.o.o" (Srebrenik).

Additionally, the staff of the Agromediterranean Faculty in Mostar held trainings on plant nutrition, and soil and leaf analysis for farmers and fruit producers in Mostar, Ljubinje, Trebinje, Ravno, Brčko, Gradačac, and Jablanica. Participating farmers received written fertilization programs developed on the basis of soil and leaf analysis conducted by the faculty experts. These trainings were conducted in collaboration with FARMA beneficiaries "PMG ViP" (Gradačac), "Maočanka Commerce d.o.o" (Brčko), and "Bojin d.o.o" (Ugljevik). In addition, assistance was provided to farmers who recently planted new strawberry varieties in Bugojno, Banja Luka, Visoko, Ilijaš, and Mostar.

As a result of the grant activities and support to Association "Bosper" from Tuzla, 16 farmers received high tunnels and irrigation systems. Per plan, each farmer planted strawberries in protected areas. Fortunately, none of them suffered major damages during floods.

In addition to these activities, a total of 988 pomegranate seedlings were delivered to Ecoline (Mostar) by the Agromediterranean Faculty. A total of 11 Eco-Line cooperanting farmers received these seedlings to develop pomegranate orchards. This is the first batch of

seedlings that were grown at the Faculty's greenhouse (developed through FARMA's grant assistance). "Barski" and "Glavaš" pomegranate varieties were included in this shipment, and another 1,012 seedlings were distributed as soon as the weather conditions permitted planting. The Agromediterranean Faculty conducted soil analysis at the cooperating farms and is in the process of providing training for pomegranate growing.

Furthermore, as a result of FARMA's support to Bios, the cooperative produced its first 100 kilometers of drip irrigation pipes this year. As a result, BiH farmers now can purchase drip irrigation systems produced in the country at a very favorable price.





Complete drip irrigation systems (pipes and hoses) made in BiH. Production of these irrigation systems — the first in the country — was made possible by the FARMA grant assistance.

Sustainability

Over the course of the year, the FARMA project undertook a number of activities to ensure sustainability of gains made by the project. For example, the project collaborated with Catholic Relief Services (CRS) to organize practical training for vegetable and raspberry producers in Srebrenica region. The project facilitated the completion of soil analysis, which served as a starting point for developing recommendations on proper land preparation, planting, and irrigation, and farmers were trained in application of those techniques. In addition, FARMA provided each farmer also with the raspberry (primocane type) growing manual. (Due to significant interest of raspberry farmers, FARMA prepared and printed 700 additional copies of this Manual and distributed in throughout the country.) CRS will support these farmers with provision of raspberry seedlings and irrigation systems at an appropriate time.

Furthermore, to ensure widespread propagation of sophisticated techniques and application of proper production standards, FARMA trained new trainers/agronomists from berry producing and processing companies from Una-Sana Canton at Butmir Berry Demo Plot in Sarajevo on proper berry growing technologies. Finally, the project organized a two-day intensive training-of-trainers for all agronomists (15 total) from each municipality of Una-Sana Canton on vegetable production in protected structures.





New high tunnels with planted strawberries

INTRODUCING NEW BERRY VARIETIES

Considering the small landholdings in Bosnia and Herzegovina, viable agricultural development in BiH depends on the production of high-value, labor-intensive crops using modern production technologies that will maximize yields and produce crops of a high standard demanded by the market.

Berry fruit varieties

A new 7 ha blueberry plantation and a 5 ha cranberry plantation were established in Živinice. This is the single largest blueberry plantation in BiH and was planted by German investor Dieter Schwerin GmbH in cooperation with BiH partner company Elisa Berry BH.

Activities related to the propagation of new berry varieties on established demo plots throughout the country proceeded as planned and on schedule in Year 5. The project facilitated contacts with breeders of protected varieties (U.S. and U.K. nurseries) to ensure that contracts for further propagation of protected varieties throughout BiH were signed with copyright owners. These signed contracts formally grant the rights for propagation of protected varieties to the Agricultural Faculty Sarajevo — Berry Demo Plot Butmir. These

rights also allow the Agricultural Faculty to further propagate and sell these varieties worldwide, while paying royalty fees to the nursery that has a copyright. The faculty will offer these varieties to any BiH nursery that has the required infrastructure for further propagation.

Moreover, Agriculture Faculty finalized the documentation for all new berry varieties, so the government can include these new varieties in the National Variety List. The same procedure for all new varieties of strawberries cultivated at the Čelić demo plot is in progress.



New berry and currant varieties produced at demo plots around the country

Regarding propagation of protected varieties, Mr. Giz Gaskin from Hargreaves Plant Nursery, licensor of Polka varieties, visited BiH. FARMA organized a meeting with the BiH Plant Health Administration and took Mr. Gaskin on a tour of the FARMA beneficiaries so he could see the testing propagation of the Polka varieties first-hand. We agreed that cooperation should be established to get an official license for propagation of Polka varieties.

Additionally, the Sarajevo Agricultural Faculty commenced collection of wild raspberries for analyses and possible cross-breeding with new commercial varieties to attain quality raspberry plants for further propagation. The Center for Plant and Genetic Resources of the Sarajevo Agricultural Faculty is taking the lead in this effort. On a related note, 400 berry seedlings were distributed to the Extension Service in Sokolac to establish a demonstration plot of new berry varieties in this region. This demonstration plot will also be used for practical trainings.

Plum varieties



FARMA assisted the USDA in exploring the potential development of the Honey Sweet plum variety demo plot in BiH. The Honey Sweet plum was developed by the USDA's Agricultural Research Service (ARS), in response to the plum pox virus (PPV), widely considered to be the most serious viral disease affecting stone fruit trees.

A meeting to present the Honey Sweet plum and discuss the potential to establish a demo plot in BiH was held at the "Spreča" farm in Kalesija with the

USDA's representative, personnel from "Spreča" (a farm owned by MILKOS dairy), and

representatives from the Sarajevo Agriculture and Food Science Faculty, the PMG ViP agriculture cooperative, the Tuzla Cantonal Ministry of Agriculture, and the Tuzla Agricultural Institute on March 21, 2014. Follow-on activities to ascertain whether development of the Honey Sweet plum demo plot would be feasible continued throughout the end of the year.

For example, in cooperation with the USDA, the project supported the organization of two roundtables with a total of 41 attendees in Sarajevo and Tuzla, with guest lecturer Dr. Ian Zagrai, the head of a Honey Sweet plum trial project in Romania. Ms. Christine Sloop, agricultural counselor from the U.S. Embassy in Rome, provided additional information on the development of the Transgenic Plum, while Mr. Fuad Gasi from the Sarajevo Agricultural Faculty gave an overview of the potential for field trials in BiH. Presentations were given to relevant BiH authorities, governmental officials, academics, beneficiaries, and students. The aim of this activity is to establish a demonstration plot in BiH. However, further activities had been derailed by the floods, and it will not be possible to establish such demo plot during the project's lifetime.



Charge d'affaires of the U.S. Embassy in BiH, Nicolas Hill, with USAID and FARMA staff, during a visit to the project's beneficiary "Popovo polje a.d.," a major exporter of apples to the EU and other countries. The company plans to increase its cold storage capacity by an additional 500 tons to have a total of 2,000 tons of cold storage capacity, to include ULO cooling storages. "Popovo polje" plans to add an additional 30 hectares of apple orchards in the upcoming season, and to cover 20 hectares of existing orchards with protective netting.

FACILITATING MARKET LINKAGES

With support from FARMA, the Swiss Import Promotion Program (SIPPO), and the BiH Foreign Trade Commission (FTC), a delegation of BiH producers visited the most important trade fair in the sector of fresh fruit and vegetables, Fruit Logistica, held February 5-7 in Berlin. Besides the organizers, the BiH delegationconsisted of representatives of 18 BiH companies including "Maočanka Commerce" from Brčko and "Voćni Rasadnik" from Srebrenica. A workshop in Sarajevo was organized during this visit and a catalog for the sector of fruit and vegetables in BiH with information on 35 leading exporters was printed. (The catalog is available in English and German and can be downloaded from the FARMA website: http://www.bosniafarma.ba/en/documents/fnvcatalogue/.)

The delegation's participation in the event was started with a roundtable titled "Promoting exports of fresh fruits and vegetables from Bosnia and Herzegovina (BiH)," organized by the FTC in cooperation with the Chamber of Commerce of Brčko District, the FARMA project, and SIPPO. More than 20 representatives from local companies and relevant institutions attended the roundtable discussion on current issues affecting the sector and sectoral production. Attendees had the opportunity to learn more about the support programs for BiH exporters of fresh fruits and vegetables. In addition, Mr. Enes Ališković, director of the Export Promotion Agency of Bosnia and Herzegovina (BHEPA), presented the scope of agency's services and outlined the FTC's plan for the coming year. Mr. Ališković presented the Chamber's plan for local producers to attend the Fruit Logistica 2014 trade show and invited attending producers to apply to the Chamber to be included in the group who would attend.

The project assisted the "Berry Brothers" company to establish connection with H&H Fruit nursery to procure aronia (chokeberry) seedlings. Berry Brothers plans to cultivate more than 100 hectares of various berries. In this first phase, the company bought 13,500 aronia seedlings, while FARMA provided technical assistance to ensure proper agricultural techniques are used in cultivation on their plot. In addition, the project assisted in logo design and slogan development. The new logo and slogan of the company will be used on all their berry products sold in-country and internationally.



The Berry Brothers' aronia farm

In May, the FARMA team attended an event for investors and entrepreneurs organized jointly by USAID and Sweden in cooperation with the REG project. A small grant award ceremony was organized during an event. Agriculture cooperative Gračanka (Gračanica), a FARMA beneficiary, received a grant from the Sweden Challenge Fund in the amount of EUR 26,000.

Additionally, six companies supported by FARMA from the fruit and vegetable subsector — Agroimpex, Bios, VIP Krajina, Jaffa Komerc, Heko, and Maočanka Commerce — had B2B meetings in April with buyers of fresh fruits and vegetables from Gothenburg, Sweden. All the companies had an opportunity to speak with several buyers.



Photo: B2B meetings with Swedish buyers

Finally, the project corresponded with GIZ (Germany) regarding possible visits of potential buyers from Germany to several producer organizations in this subsector. The Germans found the companies with which they may be interested in cooperating from the Catalogue of Fruit and Vegetable Producers in BiH developed by FARMA and its partners for the Fruit Logistica trade show.



Collection of wild raspberries



"MAOČANKA" IS A SOURCE OF INCOME FOR 700 PEOPLE

When Mr. Tursunović founded a company for purchase of medicinal herbs and fresh plums, je did not have any notion of how successful his business will become. A small family business, where Mr. Tursunović works with two of his sons, employs 14 full-time employees, 50 seasonal workers, 137 farmers-cooperants, and 500 collectors of medicinal plants. Today, "Maočanka" sell about 100 tons of dried herbs, and between 1,500 to 2,000 tons of fresh plums.

"Maočanka Commerce" is the first company in Bosnia and Herzegovina, which implemented the GLOBALGAP standard, which guarantees high product quality and business' compliance with environmental protection standard. The company also has the organic certificate for its medicinal plants, and they are actively working on implementation of the European regulation (EC) 834/2007 and (EC) No 889/2008, thorough continual education of its collectors and the processing program. This year (2014), "Maočanka" implemented the IFS standard, to ensure product quality and safety.

"We sell our products to food and pharmaceutical industries, herbal pharmacies and shopping centers in BiH. However, majority of products- about 90 percent- goes to export, to markets in Germany, Austria, Italy, Slovenia, Croatia, Russia and Serbia. We invested in construction of the processing factory, and we hope that it will be operational early next year. The capacity of this factory will be between 1,500 to 2,000 tons of fruit per year, and besides plum, we plan to process apples and pears purchased from our cooperants from across the country."said Mr. Tursunović.

(source: klix.ba)



Sida's delegation visited Frutti Funghi d.o.o. (Visoko). The Swedish delegation visited fruit plantations, cold storage facilities, a processing and packaging facility, and a recently developed greenhouse and nursery, where the company produces plant material for distribution to their cooperants. Outgoing and newly appointed Sida BiH directors were very pleased with what they saw and with what they heard from this beneficiary in terms of their production capacities and market demand. Representatives of the Bios agricultural cooperative used the opportunity to present Certificates of Appreciation to Sida officials for their assistance to agriculture in this municipality through the FARMA project. (photo above, source: VIPromo)

EU INTEGRATION, STANDARDS AND ENVIRONMENT

The project continued intervention in three key areas: (1) improving the quality infrastructure to align with the EU acquis, improve market access and increase competitiveness of the BiH agriculture sector; (2) assisting POs with implementing standards to prepare them for certification so they increase food safety standards and reach desired markets; and (3) ensuring environmental compliance to satisfy the requirements of the project's Initial Environmental Examination (IEE) and promoting sound environmental practices in alignment with environmental sustainability goals.

ANNUAL HIGHLIGHTS

- Organized an event to highlight the progress made in veterinary laboratories and inspections in BiH to move these structures closer to EU standards and requirements.
- A number of seminars were held to boost the capacity of veterinary inspectors, dairy farmers, and processors to help the institutions and the private sector in BiH meet EU standards and best prepare for EU Food and Veterinary Organization inspection.
- FARMA supported BiH Plant Health Administration (PHA) to develop three important bylaws related to EU's Sustainable Use of Pesticide Directive.
- FARMA assisted the BiH Food Safety Agency (FSA) in the field of planning, conducting, and evaluating the Monitoring Program of pesticide residues in food of plant and animal origin in Bosnia and Herzegovina.
- Training for 50 BiH phytosanitary inspectors was held in Teslić to improve the understanding of the EU regulations and the newly adopted local by-laws and to facilitate implementation of the plant health control system in line with set requirements.
- Two agricultural institutes introduced ISO 9001:2008 standards.
- Started a project activity, "Institutional support for certification and control of plant materials," co-financed by the U.S. government through the Emerging Donors Challenge Fund (EDCF) and the Czech Development Agency.
- An action plan to support the export of milk to the EU was submitted by the State Veterinary Office (SVO).
- An action plan to support the export of potato to the EU was submitted by the BiH Plant Health Administration (PHA).

YEAR 5 MILESTONES

Milestones	Status	Explanation
All relevant environment assessments/reviews conducted, reports completed	Completed	
Roundtable and workshops on sustainable use of pesticides	Completed	
Rulebook on application of PPP equipment drafted	Completed	
2 meetings with Coordination Body and Advisory Council conducted annually	Completed	One was delayed to October
ISO 9001 standard implemented at 3 BiH agricultural institutes	Completed	
Certifications such as GlobalGAP, HACCP, organic, etc., obtained by at least 8 POs	Completed	
2 to 4 lab staff attend advanced training on establishment of the laboratory analysis protocol according to EU standards	Completed	
Workshop for phytosanitary inspectors for control of imported plant material	Completed	
At least 2 workshops/seminars and/or study tours on the strengthening of BiH extension and advisory services on IPM standards conducted	Completed	

YEAR 5 MILESTONES		
Milestones	Status	Explanation
New analytical methods for residue control in BiH validated – extension of the scope of accreditation submitted to BATA (4 labs and 8 methods)	Completed	
Veterinary inspectors trained in the inspection of export facilities	Completed	
At least 2 trainings held for POs and BiH authorities on the hygiene package, HACCP, and self-assessment	Completed	
Action plan for the establishment of a national reference laboratory	In progress	
Training for lab and inspection staff held on systematic official survey for potatoes	Completed	
Roundtable held for the honey sector	Completed	
At last 2 trainings held for dairy cooperatives/associations	Completed	
Two events to improve cooperation in the dairy sector held	Not completed	
At last 4 trainings on improved management of cooperatives and association in	Completed	

Completed

IMPROVING THE QUALITY INFRASTRUCTURE AND THE BUSINESS **ENVIRONMENT**

Throughout the year, FARMA continued its work with BiH institutions on meeting international standards. This work included support for the process of legislative alignment and implementation of new legislation: official controls: and education of staff in the food. veterinary and phytosanitary sectors, responsible institutions, and private sector entities. However, BiH has not yet met the conditions for the export of potato and dairy products to the EU.

In response to the floods, the project plans to directly assist beneficiaries in recovery of equipment and irrigation systems for nurseries and research institutes. At the time of development of this report, assistance had already been provided to the Agriculture Institute in Banja Luka and nursery Voćni rasadnik from Srebrenik.

Overcoming constraints for the exports of potatoes to the EU

Adoption of the EU Acquis communautaire in the fields of agriculture, veterinary, phytosanitary, and food safety policy and meeting the safety standards in the food trade are priority tasks for the BiH agricultural sector, as they are essential for creation of opportunities for export and placement of agricultural products on the EU market. For this reason, FARMA continued its implementation of a number of activities in support of the BiH Plant Health Administration's efforts to implement the plant health control system in line with EU acquis and to harmonize legislation with international standards in this area. The project assisted in development of the PHA's training program for phytosanitary inspectors9 and helped to organize a two-day training for all phytosanitary inspectors in BiH. The purpose of the training was to assist inspectors to understand and implement plant health control systems in line with EU requirements and newly adopted by-laws. These include: (1) "Rulebook on required documentation for assessment of phyto-pharmaceutical products;" (2) "Regulations on classification packaging and equipping phyto-pharmaceutical products instructions for use;" and (3) "Rulebook on uniform principles of assessment of phyto-pharmaceutical products." These came into effect in early 2014.

The EU FVO Mission to Bosnia and Herzegovina evaluated the system of official plant health controls related to potato production and the certification of potatoes for export to the EU in March-April 2014. This was the first audit carried out by the FVO in BiH on plant health

the F&V sector held

⁹ As prescribed by the "Rulebook on the nomination of phytosanitary inspectors" (BiH Official Gazette 33/10)

matters. As noted in the EU Progress Report for 2014: "Official controls and the situation as regards the main harmful organisms affecting potatoes were assessed as generally positive. The legal framework, work of diagnostic laboratories, and control at border inspection points are generally harmonized with the EU *acquis*. Certain insufficiencies have yet to be remedied to enable the export of ware potatoes to the EU." The Action Plan for corrective measures (i.e., to implement these recommendations) was submitted by the BiH PHA early in June and was positively received by EU member states. The BiH Plant Health Administration is required to submit a Monitoring Report for 2014 before the EU can make a final decision on imports of BiH potatoes to the EU.

Overcoming constraints for the exports of products of animal origin to the EU

In October 2013, the FARMA project and the BiH State Veterinary Office organized a three-day training for two groups of 30 veterinary inspectors in two locations on the control of facilities for the export of products of animal origin to the EU. The aim of this training was to help ensure that the system of food control would be recognized by the EU and to assist in implementation of the "EU Hygiene Package," with the ultimate goal of enabling BiH producers to export milk to EU countries. Seminars covered the general principles and the legal basis for introduction of the HACCP principles in food production and dairy in particular. Practical work was emphasized, including preparation of check lists and inspection of dairy plants and dairy farms in accordance with requirements of the Hygiene Package, with a special emphasis on HACCP plans. Participating veterinary inspectors were required to conduct a mock inspection/control of hygienic and technical conditions in a dairy plant and control of the HACCP plan, including a mock control of a dairy farm.

In addition, inspectors who had been trained by experts from the Czech Republic during a three-day ToT trained 98 inspectors in total in respective entities. Topics included sampling procedures, proper handling of samples, laboratory analyses, supporting documentation, and procedures in cases where positive results are obtained.

Further, representatives of the BiH State Veterinary Office (SVO) and the Departments of Veterinary Affairs of Entity Ministries of Agriculture attended a study tour in the Czech Republic. The goal of the study tour was to enable exchange of experiences of governmental personnel with representatives of the Czech Republic Department of Veterinary Affairs on the process of developing and implementing the National Residue Monitoring Plan (NRMP). The BiH visitors were able to observe the functioning of a software solution used in support of all activities related to implementation of the NRMP in the Czech Republic, including determination of sampling requirements through sampling analysis, data entry, and monitoring and tracking of results by the authorized institutions. The Czech hosts presented in detail a system of coordination between the Department of Veterinary Affairs, the veterinary institutes, and the Agency for Control of Veterinary Medicines on issues related to development and implementation of the NRMP.

The staff of veterinary laboratories from the Veterinary Faculty in Sarajevo, the Federal Agromediterranean Institute of Mostar, and the RS Veterinary Institute of "Dr. Vaso Butozan" also benefited from practical training on software applications on Waters equipment¹⁰ at Palacky University in Olomouc, Czech Republic, in November. The aim of this training program was to prepare the staff and institutions for the process of accreditation and

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¹⁰ Waters' main product brands include: ACQUITY UPLC Systems, ACQUITY UPC Systems, Xevo Mass Spectrometry Systems, Synapt MS Systems, Synapt HDMS Systems, XTerra HPLC Columns, XBridge Columns, ACQUITY UPLC columns, Alliance HPLC Systems, Empower Chromatography and MassLynx Mass Spectrometry Software, Oasis Sample Preparation Products

validation of analytical methods prescribed by the NRMP. Training participants conducted practical analyses of pesticide residues, malachite green, and nitrofurans on UPLC.

In December 2013, FARMA organized a workshop in Banja Luka, hosted by the RS Ministry of Agriculture and the State Veterinary Office with participation from the FBiH Ministry of Agriculture. Participants included veterinary inspectors, dairy farmers, and processors from both entities. The workshop covered topics such as: official control of dairy farms and dairy processors, traceability of milk "from farm to final product," as well as the practical training/mock inspection of a dairy farm "Farmland" where trainers simulated an EU FVO inspection focusing on HACCP implementation. During the training, farmers who sell milk to exporting dairy companies were informed about all conditions that must be met, including requirements for animal health management and animal identification. This was an additional capacity-building effort to help the preparation of the institutions and the private sector in BiH for an anticipated EU FVO inspection. The trainers were from Serbia, a country which recently passed an EU FVO inspection.





Experts from the Czech Republic during training in BiH (left photo) and training in official controls of milk and dairies held by Dr. Florjanc from Slovenia (right photo)

Two spot audits were held by the European Food and Veterinary Office (EU FVO) at the beginning of 2014. The scope of the EU FVO audits was to ensure that competent authorities in BiH correctly apply relevant EU standards (or equivalents) with respect to animal, plant, and food products intended for export to the European Union. The aim of these audits was to verify that applicable requirements in the related areas were properly implemented and enforced.

The inspection of milk and facilities for export of milk was carried out in January; the responsible authority for this sector is the SVO. The objective of this audit was to evaluate the operation of controls over the production of dairy products for human consumption intended for export to the EU, as well as certification procedures. Unfortunately, the audit findings were negative in several areas. EU auditors cited "inefficient and ineffective organization of official controls," along with "lack of efficient supervision and inconsistent controls" which stem from "the organization of the veterinary service with its veterinary departments and inspectorates, [which] reflects the constitutional organization of BiH ... [where] further contracts and agreements are necessary to give full effect to the Protocol, by which the State Veterinary Office (SVO) is appointed as the body responsible for organizing official controls of milk and dairy products for export to the EU."

DONORS RECOGNIZE THE IMPROVEMENT OF VETERINARY LABORATORIES

USAID BiH Mission Director David Barth, Sida BiH Director Pelle Person, and Czech Development Agency Director Michal Kaplan, with the SVO and the BiH FTC, held a

presentation on November 13, 2013, to highlight the progress made in veterinary laboratories and inspections in BiH toward EU standards and requirements. During this event, certificates were awarded to laboratory staff who completed training in the Czech Republic and Bosnia and Herzegovina, and to laboratories which successfully completed inter-laboratory testing. A short video that summarizes key results from the perspective of the project participants was shown to attendees. Click the following link to view the video: Strengthening Capacity of B&H Veterinary Laboratories and Veterinary Inspection Services



USAID BiH Mission Director David Barth (sixth from left) and Sida BiH Director Pelle Person (fourth from right) with laboratories staff

However, audit findings concluded that "... the laboratory services are technically capable of testing for the raw milk quality parameters specified in Regulation (EC) No 853/2004." This is a validation of the success of the "Strengthening capacity of veterinary laboratories and veterinary inspection services for implementation of the National Residues Monitoring Plan (NRMP) in accordance with EU standards" project — a project implemented by FARMA in collaboration with the Czech Development Agency (CzDA).

To address these recommendations, the FARMA project, in collaboration with the BiH State Veterinary Office, Entity Ministries of Agriculture, and inspectorates, engaged a consultant from Slovenia, Dr. Primoz Florjanc, to assist the SVO's working group in the development of an action plan for overcoming obstacles to export of milk from BiH to EU, and to train the key experts. In addition, Dr. Florjanc held a training on "Official controls in dairies and farms of dairy cows in line with EU requirements and certification process for shipments of milk and milk products intended for export to the EU" in May in Čitluk, during which participants redefined the Action Plan to address deficiencies in the BiH milk control system. After approval by the relevant BiH institutions, the Action Plan was submitted to the FVO (July 2014).

Within the scope of the implementation of the project "Strengthening the capacity of veterinary laboratories and veterinary inspections," a number of activities were completed in this quarter. The team from the National Veterinary Institute, Prague visited BiH in the period 14 – 18 April, 2014. During the visit, Czech experts and the management of veterinary laboratories developed a plan to introduce new methods as prescribed by the National Program for Monitoring Residues in Bosnia and Herzegovina. Czech experts worked with BiH laboratory personnel on analyses of carbamates, pyrethroids and other methods in preparation for the accreditation process in BiH. Further, the staff of the Veterinary Institute

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¹¹ Alternatively, copy the following link in the browser to view video http://www.bosniafarma.ba/docs/usaid-sida_-strengthening_bih_veterinary_capacities_640x360.mp4

of the Republic of Srpska, Dr. Vaso Butozan, attended practical training on analysis of arsenic in products of animal origin. Training in the Czech Republic covered issues ranging from samples preparation to validation of results and analyses of sulfonamides (Group B1) in foods of animal origin.

In September 2013 and April 2014, Czech consultant visited all laboratories that are in the project "Strengthening veterinary laboratories and veterinary inspection for the implementation of NRMP" and had meetings with the management of laboratories to agree on the methods that will be implemented in their institutions, bearing in mind the capacity of technical and human aspects. It was also agreed and materials and chemicals that are required to meet the project objectives and validate and accredit methods.

Furthermore, an IT Consultant from the Czech Veterinary Administration developed a program that shortens preparation and monitoring of the results of analyzes of samples from the annual residue monitoring program for the country in collaboration with the staff of the State Veterinary Office. Training was held in Sarajevo, as a follow-up to the training held in November 2013 in Prague, where the representatives of the BiH Veterinary Office and the Entity Ministries of Agriculture were exposed to methods of preparation and implementation of the residue monitoring program in the Czech Republic.

Since the EU did not accept an Action Plan submitted by BiH, FARMA engaged dr. Primoz Florjanc from Slovenia to work with representatives of the SVO, the Entity Ministries, veterinary sectors and inspectorates from both entities on the revision of the Action Plan, to develop required documentation and to define activities aimed at eliminating gaps in the control system of milk in BiH, in accordance with the recommendations of the EU FVO (Food and Veterinary Organization EU) Mission. All documents were developed, completed and Action Plan was forwarded to DG SANCO on August 27.

BUILDING CAPACITY OF INSTITUTIONS AND LOCAL ORGANIZATIONS

The country as a whole continued its path toward harmonization with EU legislation and establishment of the EU-equivalent food safety system. Yet, capacities of laboratories engaged in food control still require significant strengthening.

BiH Plant Health Administration (PHA)

In 2014, the USAID/Sida FARMA project, in collaboration with the BiH Plant Health Administration, started training activities under the "Institutional support for certification and control of plant materials" project activity. The first seminars under this project activity on the topic of "Variety list" were held in April. Also two study tours were organized in June 2014, in cooperation with the Czech Central Institute for Supervision and Testing in Agriculture. A total of 20 participants, representatives of the Plant Health Administration, phytosanitary inspectors, Entity Ministries of Agriculture, nurseries, agricultural institutes and faculties, (institutions authorized for approval and certification of plant materials and implementation of the legislation pertaining to plant health and certification of plant material in BiH), attended these study tours. The main purpose of the study tours was to help BiH in the process of establishing a system of official control and certification of plant materials aligned with the EU acquis; to protect the identity, quality, and health of plant propagation material. Czech experts gave excellent presentations, while the participants had the chance to visit Czech nurseries and a number of authorized institutions involved in plant health control and inspection. In July 2014, two Czech experts worked with the staff of the BiH Plant Health Administration to start the process of harmonizing legislation and procedures in BiH with the EU acquis, which pertinent to certification and control of plant materials. In addition, the project activity supported the monitoring and maintenance of the berry demonstration plot in

Butmir during 2014 in order to continue the necessary testing of pre-selected berry varieties, which have a high potential to be added to the National Variety List. Furthermore, within the scope of the project activity, assistance was provided to key flood-affected beneficiaries of the project so they are able to reinstate their function in official control, certification and seedling production. In September, the Czech experts visited key institutions and main nurseries to determine additional appropriate additional direct assistance to help BiH adapt new technologies and meet EU standards in the production of high-quality disease-free plant materials.

Through this project, FARMA expects to substantially advance progress towards harmonization and implementation of legislation and processes related to official control, certification and registration of new varieties through the following activities:

- Capacity building relating to the certification system including official controls;
- Harmonization of legislation, pertinent to certification and control of plant material, in BiH with the EU acquis;
- Establishing a fully functional system for the registration of new varieties;
- Establishing a control system of propagating material; and
- Improvements in plant nursery production.

Apart from the BiH Plant Health Administration, farmers and nursery producers, the following bodies responsible for control of plant material will also benefit from the project: entity ministries of agriculture, forestry and water management, inspectorates and other bodies involved in official control such as: agricultural faculties and institutes from Sarajevo, Banja Luka and Mostar. FARMA organized meetings with entity ministries, inspectorates and institutes to present the technical start-up of the project and to define the plan of activities for the project. The activities and implementation timelines were established for the first phase (April – June 2014).

BiH Food Safety Agency (FSA)

FARMA continued its provision of technical assistance and support to FSA, in order to strengthen their capacity in the areas of implementation of a monitoring program for food products, risk assessment, implementation of new legislation pertaining to official control of food and animal feed, as well as strengthening the analytical capacities of food laboratories.

Bosnia and Herzegovina adopted the EC Regulation 882/04 into its national legislative framework. In an effort to strengthen the capacity of laboratories, the FARMA project, in coordination with the BiH Food Safety Agency (FSA), contracted Slovenian Plant Health Institute from Maribor to conduct proficiency testing of eight laboratories which demonstrated their interest in taking part in the national monitoring program of pesticide residues in food of plant and animal origin. The results of the proficiency tests were presented at the workshop "The role of laboratories in the official control of food and analysis of pesticide residues in products of plant origin" in October 2013. None of the laboratories fully passed the test but three had substantially better results than the rest.

During the workshop as well as during the meeting in Maribor held in December 2013 between the Food Safety Agency, FARMA and PHA, it was concluded that the best performing BiH laboratories should extend their knowledge to expand their list of analyzed pesticides in accordance to EC No 788/2012 and MRLs for pesticides defined by the Directive 91/414/EEC and Regulation (EC) No 396/2005. Moreover, Slovenian experts assisted the FSA in the field of planning, conducting and evaluating of Monitoring Program for the Official Control of Food of Plant and Animal origin as well as Food Contact Material (FCM), with respect to pesticide residues. The project and the FSA agreed on the extent and

scope of the support which FARMA would provide to the Agency. The training of the laboratory and the FSA staffs in risk assessment was provided in 2014.

As EU legislation related to pesticides is very complex, FARMA supported the following activities in relation to implementation of the EU directive No 882/2004 in the field of risk assessment in the context of official control of foods of plant and animal origin, as well as the needs for the successful implementation of the MPPFPA in BiH 2013 – 2015:

- Strengthen the capacity and prepare BiH laboratories to successfully carry out laboratory analysis in the framework of the Monitoring Program control of pesticide residues in and on food of plant and animal origin in BiH in 2014. The USAID / Sida FARMA project and the BiH Food Safety Agency, organized a training program at the National Laboratory for Health, Environment and Food (NLZOH) in Maribor, Slovenia. During the training, the participants from three BiH laboratories worked on preparation of various types of food samples and testing for presence of pesticides and heavy metals, instrumental analysis, data processing, and measurement uncertainty. The training took place in the period March 3-7, 2014.
- Two training session were held in Mostar for institutions involved in the implementation of the monitoring program and official control for pesticide residue.
- Technical assistance was provided on updates to the monitoring program for 2014 and the system of reporting to EU authority.
- Two advanced training sessions for the FSA staff responsible for risk assessment were held in Mostar (January 2014) and in Maribor (March 2014).
- FARMA, FSA, and NLZOH organized a workshop "Monitoring program for pesticide residues in food of plant and animal origin in Bosnia and Herzegovina 2013 to 2015" in order to present EU requirements for successful implementation of the program to all BiH involved actors (FSA, SVO, PHA, inspectorates, laboratories etc.) and to present the updated program for 2014. Training sessions for more than 40 participants from all responsible institutions were held by the experts from NLZOH Maribor, Slovenia.

Further, FARMA organized a study tour to the Czech Republic related to the Pesticide Monitoring Program and National Action Plan to reduce the use of pesticides in accordance with the Sustainable Use of Pesticides Directive. The study tour was supposed to take place in June 2014, but was postponed until July due to the floods. The purpose of this activity was to help BiH institutions and producers to understand the EU requirements and their practical implementation.

Representatives from the BiH Food Safety Agency and inspectorates of FBiH, RS and BD BiH participated in the tour. The host partner organizations included: the State Veterinary Institute Prague and the Czech Agriculture and Food Inspection Authority. They presented and discussed the European Union Reference Laboratories (EURL) for pesticides, proficiency testing, the National Action Plan for Sustainable Use of Pesticides, the Pesticide Monitoring Program, sampling procedures for official samples, the Guidance Document on Analytical Quality Control, validation procedures for pesticide residue analysis in food and feed, preparation and processing of data, reporting to EFSA, and the definition of residues. The tour also included a visit to the official laboratory – the National Reference Laboratory for Pesticides – Fruits and Vegetables, Single Residue Method and Cereals and Feeding Stuff (CAFIA).

RS Ministry of Agriculture

Countries with aspiration of becoming EU members are developing strategies for rural and agriculture development. In Bosnia and Herzegovina, these strategies are being developed at the Entity level. The Federation BiH drafted the Agriculture Development Strategy, and the Rural Development Strategy is being finalized with donor support. On the other hand, these strategies are in the early stages for development in the Republic of Srpska (RS).

FARMA supported the RS Ministry of Agriculture, Forestry and Water Management in development of the RS Agricultural and Rural Development Strategy, which is broadly aligned with the EU Common Agricultural Policy (CAP). The aim of the Strategy is to determine the rural and agriculture development goals and objectives as well as methods to achieve these objectives with an aim of increasing agricultural production on a sustainable basis; increasing the processing of agricultural products; and facilitating sustainable and more equitable rural development. The RS strategy for agriculture and rural development is being prepared in two phases:

- Analysis of the current situation and perspectives for development of agriculture and rural areas in RS.
- Definition and development of the strategic framework for development of agriculture and rural areas in RS.

The review and strategy development is being guided by an international expert (engaged through FARMA) with knowledge of and experience in agriculture and rural development issues in the Balkans as well as knowledge of the EU Common Agricultural Policy. Consultant Dr. Emil Erjavec from Slovenia provided recommendation and suggestion to the Ministry's working group. This work continues, but the flood-response took precedence over strategy development.

ASSISTING POS TO IMPLEMENT STANDARDS

USAID/Sida FARMA provided support to the Institute for Standardization of Bosnia and Herzegovina (BAS) in organization of the meeting of the technical committee ISO/TC 34/SC 12, Sensory Analysis, which was held in October in Sarajevo. ISO/TC 34/SC 12 is a subcommittee of the International Committee ISO/TC 34, Food products, which operates under the auspices of the International Organization for Standardization (ISO). Work of this Committee is focused on adoption of standards which define the area of sensory analysis in food production. Such activities directly contribute to increasing awareness of importance of standardization in food production processes. Moreover, these activities contribute to promotion of significance of standardization in EU integration processes.

In Year 5 FARMA continued assisting local producers with implementation of international standards and quality management systems (i.e. GLOBALG.A.P., Organic, ISO, HACCP System). For example in last quarter FARMA assisted Terra Sana with series of training on GAP and Organic standard. Their production of essential oils was intended for sale in EU and organic certification is required. They have also been supported to establish internal control system needed for certification of group of farmers as per Smallholder certification concept and started conversion period for cultivated crops.

FARMA also provided the technical assistance to three agricultural institutes to maintain the Quality Management System (QMS) and introduce ISO 9001:2008 standards in Year 5. Internal audits were conducted during the year, and in September two agricultural institutes (Sarajevo and Mostar) will attain certificates, while Institute from Banja Luka will complete full

process by November. The official award of the ISO 9001:2008 certificate to this institute will take place by the end of year.

Since the beginning of the project, FARMA assisted a number of POs to implement relevant standards, in total 52 producer organizations attained certifications.

Further, FARMA held two-day training on "Financial analyses of cooperatives" for young and newly appointed directors of agricultural cooperatives in Čitluk between December 4 and 6, 2013. This activity was organized in cooperation with Cooperative Associations from FBiH and RS and ACED (which is currently implementing a project in cooperative sector financed by Sida). Furthermore, training on "Importance and role of cooperatives" was also held for the staff of the Women for Women International organization.

Finally, FARMA organized and held training for members of the Board of Directors of the cooperative "Žena" in Bratunac on the "Role of the managing bodies of the cooperative," and training for fruit producers from Kreševo, Kiseljak and Fojnica on the "Role of Associations in agriculture development" with Swiss Caritas. Moreover, training for women producers of Romanija sour cream ("skorup") Sokolac, Han Pijesak, and Rogatica was held in this quarter. Once these producers form their association, they will engage in the process to protect the geographical origin of the "Romanijski kajmak-skorup". Also, assistance was provided to "Prnjavor" cooperative in development of the Action Plan to overcome problems in cooperative functioning (membership, structure of the Management Board, loan repayment, etc.).

ENVIRONMENTAL COMPLIANCE

ENVIRONMENTAL COMPLIANCE

USAID/Sida FARMA continually follows USAID environmental regulations, namely the IEE, PEA and PERSUAP pertaining to FARMA. Since project inception, FARMA has reviewed grant applications to determine the adverse impact on the environment, in accordance to procedures set forth in the PEA. FARMA Environmental Specialists completed environmental checklists (Annex 3 of the PEA) and assigned a screening determination. A large number of site visits to POs that were recipients of PDF Grants were conducted to document environmental compliance.

As per the PEA, Categorical exclusion was assigned for the same types of activities as in the FARMA IEE: Education, technical assistance, or training programs except to the extent such programs include activities directly affecting the environment (such as construction of facilities, etc.)[22 CFR 216.2(c)(2)(i)]. Analyses, studies, academic or research workshops and meetings were also classified as categorical exclusion.

A negative determination with conditions was assigned to activities involving physical interventions covered in the PEA, including installation of cooling chambers, drying kilns and greenhouse construction, for which an Environmental Mitigation and Monitoring Plan (EMMP) has been proposed in the PEA. As physical locations of the potential beneficiary were unknown at the time of the PEA preparation, site-specific assessment, incorporating EDD and PPA, was also be conducted using the template in the Annex 5 of the PEA. A negative determination with conditions was also assigned for activities involving the use or procurement of pesticides provided the activity abides by the FARMA PERSUAP.

Activities not falling under any of the above categories, was deemed 'unclassified' and was further assessed through an environmental review process (Annex 4), which is more detailed than the screening process and upon which it may be determined that additional EAs are necessary.

FARMA completed reviews of 115 grant applications since the beginning of the project.

Ensuring compliance

Environmental compliance was the standard part of the contract signed between FARMA and the grantee. The grantee was requested to implement the EMMP as well as report on the implementation to the FARMA project. Compliance to recommended mitigation measures were also checked by the FARMA Environmental Specialist, sometimes resulting in additional PO-specific recommendations or recommendations for FARMA to address at the sector level. Compliance was sometimes difficult to implement fully due to the lack of institutional frameworks and local government enforcement of environmental regulations. For example, some organizations have been separating hazardous from non-hazardous wastes only to be collected at the same time and mixed again by the local municipal authorities. Such issues are beyond FARMA's ability to solve.

MITIGATION OF INDIRECT, CUMULATIVE AND SECTOR SPECIFIC ISSUES

FARMA has also actively supported activities that will mitigate indirect, cumulative and sector specific issue, as described in the PEA. The table below summarizes these efforts.

Frui	Fruit and Vegetable sector				
A)	FARMA shall prepare and implement a PERSUAP for the main crops supported by FARMA.	FARMA prepared the PERSUAP in Year 1 and was approved by USAID on 5 May 2010 (DCN:2010-BOS-007). FARMA's implementation of PERSUAP's recommendations is described further below. FARMA updated this PERSUAP in August 2013, which has been approved by USAID in October, 2013.			
B)	FARMA shall implement a comprehensive plan to introduce Good Agricultural Practices in BiH. Facilitating the introduction of GLOBALG.A.P. in BiH should be the cornerstone of this plan.	FARMA developed a comprehensive plan to introduce and implement GLOBALG.A.P. on farms. Implementation of GLOBALG.A.P. in BiH is expected to improve farm management, achieve higher product quality and improve environmental outcomes as well as assist producers maintain or access new EU markets. FARMA's efforts included awareness-raising throughout BiH as well as direct assistance to POs wishing to implement GLOBALG.A.P. on their farms. By August 2014, 23 FARMA-assisted POs achieved GLOBALG.A.P. certification since the beginning of the project.			
C)	Promote organic agriculture in BiH, as a sustainable farming technique in areas where this technique will provide not only positive environmental outcomes but also appropriate level of food security and economic return desired by the farmer.	FARMA also provided comprehensive assistance to several POs to meet organic standards. This included assistance in technical aspects of organic farming as well meeting organic certification requirements. By August 2014, 20 FARMA-assisted POs, obtained organic certification since the beginning of the project.			

Training-of-trainers for personnel from agricultural extension and inspection services was held on "Standards of Good Agricultural Practices (GAP) on Farms" in December 2013 in Tuzla. Training covered four GAP standards: environment, protection of animal and human health, animal welfare, and good agriculture conditions. The purpose of this activity was to develop a critical mass of educators/extension advisers who can train farmers and others, on ways how to minimize adverse environmental impacts from fertilizer and pesticide use in agriculture in line with EU requirements (and in compliance Promote Good Agricultural and with USAID environmental requirements, notably the IEE, FARMA PEA and Hygiene Practices in Dairy Farming, PERSUAP). The aim was to ensure that the farmers optimize their yields; and through training materials and that their farms are meeting traceability requirements, while producing food training, to minimize adverse and animal feed safe for consumption, with minimal adverse impact on the environmental and health effects. environment. Trainings continued over the course of January and February 2014. The training will promote optimization of yields and meeting the traceability requirements, while providing food and animal feed that is safe to consume and with minimal adverse impact on the environment. The training was designed for milk producers (interested in exporting of milk to the European Union), and companies successfully exporting fruits and vegetables to the EU. The presentations covered the new standards in agriculture in the EU which relate to the protection of human and animal health, and environmental protection.

Dairy sector

B) Promote Good Practices according to the EU Nitrates Directive through training and grants.

The Association of Agricultural Producers from Živinice organized training for dairy farmers (lecturer Ph.D. Stane Klemenčić from Slovenia) in collaboration with the FARMA project and the Agricultural Extension Service Tuzla. Farmers were educated about sources of water pollution from agricultural activities, and on the methods for reducing and preventing water pollution from agricultural sources in accordance with the EU Nitrates Directive requirements. FARMA organized a visit for the farmers to the OP "Sanel Omičević" dairy farm, where they were able to observe proper feeding practices, herd management techniques and how this farm implemented the EU Nitrates Directive requirements in practice.

Medicinal and Aromatic Plant (MAP) sector			
A)	Promote Good Agricultural and Collection Practices (GACP), through training materials and training, to minimize the chance of over-harvesting of wild plant materials.	FARMA implemented a project titled "Increasing awareness on importance of pollination and proper application of pesticides in orchards, in order to protect bees and increase yield" in cooperation with Košnica Gradiška. Theoretical training has been completed, as well as the practical training of beekeepers and fruit growers. The demo plots were successfully established, and written reference materials were produced. Observations indicated significant positive differences in productivity between plants pollinated by bees and those that were not.	
В)	Work only with SMEs that are collecting wild plants in a sustainable manner or have or are working towards organic certification, GACP or ISSC-MAP.	FARMA provides most of its support to SMEs in the MAP sector that have organic certification. In Year 5 FARMA provide supports to MAP POs Terra Sana to reach organic certification and implement GACP.	
C)	Provide assistance to SMEs where funding will be used for value-adding rather than additional harvesting from the wild.	FARMA's activities in the MAP sector are focused on value-adding and MAP cultivation.	
D)	Promote cultivation of plants that are currently being harvested to a significant extent.	FARMA's MAP team continued a comprehensive program on MAP cultivation. This was done both through STTAs and subcontracts. The latest assessment of the FARMA project indicates that the cultivated medicinal plants areas are gradually increasing. Around 600 hectares had been planted with various types of plants, with chamomile being the most predominant plant.	

Implementation of PERSUAP recommendations

In reference to the PERSUAP recommendations, FARMA has been conducting the following:

- Promoting only the least toxic pesticides available on the BiH market and approved in the PERSUAP, under the broader framework of Integrated Pest Management (IPM).
- Promoting IPM and safe use practices described in the PERSUAP. FARMA has been building the capacity of BiH institutions, farmers, agricultural advisers, agricultural inspectors, in aspects of IPM, safe pesticides use, phytosanitary control, so that best practices continue to be promoted post-FARMA.
- In cooperation with the BiH Plant Health Administration FARMA supported the organization of trainings for phytosanitary inspectors on the latest legislation concerning plant protection products, proper use of pesticides, protection of human health, and environmental protection. The purpose of the training was to assist inspectors to understand and implement plant health control systems in line with EU requirements and newly adopted by-laws, that include: "Rulebook on required documentation for assessment of phyto-pharmaceutical products", "Regulations on classification packaging and equipping phyto-pharmaceutical products instructions for use" and "Rulebook on uniform principles of assessment of phyto-pharmaceutical products."
- FARMA continued support to BiH Food Safety Agency (FSA) in year 5 to help in implementation of the Monitoring Program for Pesticide Residues in Food of Plant and Animal Origin in BiH in the period 2013 2015 (MPPFPA) according to provisions of Regulations 882/2004/EC–Official control, 396/2005/EC–MRL of Pesticides in Food and Feed and 788/2012/EC. Support has been provided for following:

- Preparation of food laboratories to successfully carry out laboratory analysis;
 Training program carried out at the National Laboratory for Health,
 Environment and Food (NLZOH) in Maribor, Slovenia for three BiH laboratories testing presence of pesticides and heavy metals (March 3-7, 2014);
- Study tour to the Czech Republic related to the Pesticide Monitoring Program and National Action Plan to reduce the use of pesticides in accordance with the Sustainable Use of Pesticides Directive was organized for staff of FSA and inspectorates;
- Two training session were held in Mostar and Sarajevo for institutions involved in the implementation of the monitoring program and official control for pesticide residue (PHA, SVO, FSA, entity ministries and inspectorates);
- TA was provided on updates to the pesticide monitoring program for 2014 and the system of reporting to EU authority;
- In addition, in year 5 FARMA implemented a project titled "Increasing awareness on the importance of pollination and proper application of pesticides in orchards, in order to protect bees and increase yield" in cooperation with Košnica Gradiška. This activity includes the establishment of demo plots to enable the comparison of fruit productivity between plants pollinated by bees and those that are not. This activity is especially important early initiative of the FARMA project, as the issue of proper application of pesticides and pollination now sits high on the EU agenda.

ACCESS TO FINANCE

The primary objectives of activities in this cross-cutting component include: (1) increasing the ability of POs to obtain new financing from commercial institutions; (2) increasing the ability of POs to attract new foreign investments; (3) disseminating information on available financial products for agriculture; and (4) preparing local POs to access EU pre- and post-accession agriculture and rural development funds.

ANNUAL HIGHLIGHTS

- Held training on financial analysis for management of agricultural cooperatives.
- Held presentation on the DCA Guarantee Facility and "business angels" financing concept at the annual meeting of producers and processors of medicinal and aromatic plants (MAPs) and forest fruits.
- Held training seminars on project proposal writing for rural women, business planning, management of receivables, liquidity, and VAT in agriculture. As of the end of August 2014, seven (7) business plans attained total new financing of BAM 711,360.
- Prirodno bilje- FARMA beneficiary- obtained 30,000 KM in DCA loans.
- Formal establishment of the joint venture company of FARMA beneficiary Mushroom and Dutch investor was completed. The joint venture company is named "Casa Mushrooms," and is based in Nova Topola business zone.
- FARMA's beneficiary, Dars voće d.o.o (Derventa), attracted foreign investment a Turkish investor bought the company and invested in expansion of their production capacities. The value of this deal is BAM 1.5 million (US\$ 1,044,672).
- Continued management and administration of the three existing USAID/BiH Development Credit Authority (DCA) Loan Portfolio Guarantee facilities.
- Training of trainers on "Financial management to strengthen capacity of cooperative sector" to ACED staff held.

INCREASING THE ABILITY OF POS TO OBTAIN NEW FINANCING FROM COMMERCIAL INSTITUTIONS

In order to assist the cooperatives in obtaining commercial financing, USAID-Sida FARMA, in cooperation with RS Cooperative Association, Cooperative Association of FBiH and Agency for Cooperation and Economic Development (ACED), delivered training to cooperative managers on "Financial analysis of cooperative business management". Eleven course participants received certificates following the completion of a 2-day training, which was held in Čitluk between December 4 and 6, 2013. A trainer from ACED assisted during the training and will continue to provide these trainings independently in the future.

In addition, the USAID/Sida FARMA project, in cooperation with the FIRMA project, regional development agencies REDAH and SERDA, and the RS Chamber of Commerce, organized one-day training on "Liquidity management and collection of receivables." Training was held in Sarajevo, Mostar and Banja Luka during March 2014. The purpose of this training was to increase the ability of participants to help others in the collection of receivables and liquidity management in small and medium enterprises and cooperatives. A total of 98 attendees took part in the training held by Mr. Hrvoje Bogdan, partner and director of the Adizes Southeast Europe office in Croatia.

The project also organized a number of two-day training seminars on project proposal writing for rural women throughout BiH during the reporting period. Trainings were held in Sarajevo, Tuzla and Prijedor, by the FARMA subcontractor "ACED," with the participation of 45 women representing 20 organizations from the central, north-east and north-west parts of BiH. As a

result, 17 business plans have been developed with a total value of KM 348,051; and 10 business plans have been submitted for financing with a total value of KM 233,883.



Training on VAT in agriculture in Banja Luka

Further, four three-day training seminars on business planning were held in Laktaši, Mostar, Tuzla and Bugojno by the FARMA subcontractors "Revicon," "REZ," and "ACED." These trainings were attended by 65 people from north-west, north-east, central and southern BiH. As a result of this support, 32 business plans have been developed with a total value of BAM 13,351,485 and 18 business plans have been submitted for financing with a total value of KM 3,623,026.

Moreover, in response to high demand from agricultural producers, FARMA organized a series of trainings on VAT in agriculture. Mr. Jozo Piljić, an expert from the BiH Indirect Tax Authority provided practical examples and training for farmers and Extension Services employees over the course of 10 training seminars for 410 attendees in Prijedor, Modriča, Bijeljina, Banja Luka, Gradiška, Foča, Bihać, Sanski Most, Prnjavor and Novi Grad. The trainings were organized in collaboration with the RS Ministry of Agriculture, Municipality Bihać, and the Farmer Association from Sanski Most.





Attendees at Project Proposal Writing for Rural Women training (photo left), and practical training in business planning (photo right).

Also, during the reporting period, "Prirodno bilje" (FARMA beneficiary) obtained a 30,000 KM working capital DCA loan from UniCredit bank. This is a new line of credit option (since January 2014) under DCA guarantee, which enables applicants to obtain short-tem working capital loans. FARMA distributed over 100 brochures on the availability of this new line of credit to beneficiaries, and this is the first client to capitalize on this opportunity.

Additionally, the FARMA Financial Manager assisted Mushroom (FARMA beneficiary) in development of the concept paper and supporting documents for a GDA grant application in the amount of US\$ 600,000. Further, FARMA assisted Mr. Sayad Kamal of Gillani Consulting Group, Inc. by reviewing and commenting on a Business Plan for recommencing operations in the Milgor dairy in Goražde.

Immediately after the floods, FARMA commenced information collection from commercial lending institutions on the effects on their clients and agriculture loan portfolios. (The effects of the flooding on the DCA portfolio are summarized under "DCA Administration," below.)

The FBiH Banking Agency (per Law on protection of users of financial services; Article 31/(2)) issued an instruction to banks that they can (per corporate decision) announce a moratorium on loan repayments (12-month maximum), or enter into negotiations with clients to restructure their loans without requiring a default interest payment. Per this instruction, if the banks decide to use either of the two available options, then they are forbidden to charge a "moratorium fee" and to calculate late interest on past due payments on loans for all clients in flood affected areas. In addition, the FBiH Banking Agency encouraged micro-credit organizations (MCOs) to reduce their applicable interest rates. The RS Banking Agency has not issued similar instruction yet.

Some MCOs already started restructuring their loan portfolios. For example, in May alone, Mi-Bospo MCO restructured 50 loans originating in the regions of Maglaj, Doboj, and Bijeljina (the municipalities most severely affected by the floods).

INCREASING THE ABILITY OF POS TO ATTRACT NEW FOREIGN INVESTMENTS

Early in 2013, FARMA assisted Mushroom to obtain a EUR 1.3 million investment from Holland for establishment of a joint venture (JV) company. The formal registration and establishment of the JV entity is now complete. The JV is called "Casa Mushrooms" with headquarters in the Nova Topola business zone, where they also plan to construct a new production facility.

Further, FARMA's beneficiary, Dars voće d.o.o" (Derventa), attracted foreign investment - a Turkish investor bought the company and invested into expansion of their production capacities. The value of this deal is BAM 1.5 million (US\$ 1,044,67212).

It is worth noting that agriculture and food production seem more attractive for investments, both domestic and foreign, despite weak investment environment. For example, Azerbaijan bought a fruit and vegetable processing company, Bosanka, in Doboj. At the ceremony of commencement of construction on the new factory facility, it was stressed that the entire investment will reach EUR 40 million, and that at least 300 workers will be employed, with 1,000 agricultural cooperants selling their products to the company.13 This was an intergovernmental investment agreement facilitated at the highest levels, and the project claims no credit. In addition, after buying the entire "Juicy" brand from Agrokor (Croatia) in a EUR 45

¹³ Source: ekapija.ba

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¹² Per exchange rate on 7/8/2014

million deal, Stanić grupa commenced construction of the new fruit juice production factory in Kreševo. The value of the investment in the new factory was not disclosed.14 This is a corporate investment decision in the birthplace of sole owner, hence the project claims no credit.

STRENGTHEN POS CAPACITY TO ATTAIN RELEVANT AND TIMELY INFORMATION ON AVAILABLE FINANCING

Presentation of the DCA Guarantee Facility (within the USAID/Sida FARMA project framework) was well received at the annual meeting of producers and processors of medicinal and aromatic plants (MAPs) and forest fruits, held in November in Sarajevo at the Foreign Trade Chamber of Bosnia and Herzegovina (BiH FTC). The attendees (35 total) also attentively listened to the presentation on "business angels" financing concept, which was presented by BIZOO Angels. Representative of the Embassy of the Kingdom of Sweden to BiH provided information on the "Challenge fund", through which companies may attain grants of up to 30,000 EUR.

DCA ADMINISTRATION

At the end of August 2013, FARMA assumed management and administration duties over the USAID DCA portfolios in BiH, which included three existing USAID/BiH Development Credit Authority (DCA) Loan Portfolio Guarantee facilities. Detailed monthly reports are sent separately to the USAID Mission BiH, while summaries are provided in each of the FARMA's quarterly reports. For the sake of brevity, these are not included in the annual report.

All DCA banks informed us on the extent of exposure of their DCA portfolios to recent floods. Sberbank and UniCredit Bank claim their DCA portfolios are not exposed at all (zero risk). Raiffeisen Bank stated that only one client suffered loss due to floods – Sejdić Commerce doo (Odžak). The value of the loan is BAM 300,000, but the bank expects the client to stay current with loan repayments.







Training on liquidity and management of receivables

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¹⁴ Source: ekapija.ba

DEVELOPMENT FUND

The Development (Grant) Fund (DF) Manual is designed to comply with the European Commission Grant Award Processes and future IPARD funding requirements to the extent feasible. Although there are differences in general funding structures, the FARMA DF fund is similar to IPARD's basic management rules and eligibility criteria. The FARMA DF objective, structure and characteristics reflect key IPARD principles.

GRANTS

During the fifth year, the project continued to process full grant applications solicited through the Requests for Applications published in July, October and November 2013.

A total of 22 grant requests (exluding that for flood relief and recovery) with a value of BAM 726,558.27 were approved during the year. Majority of these grants were used in procurement of new and essential equipment for agricultural production or processing. These grants are expected to contribute to creation of 32 new direct and 1302 indirect jobs. In addition, FARMA has approved 6 grants as a quick and targeted assistance to flood affected farmers from Samac, Bratunac, Zvronik, Doboj and Doboj Istok municipalities. These farmers are from livestock and fruit and vegetable sector who lost animal feed both planted and stored and green houses during the floods. FARMA also provided financial assistance to the Extension Service from Doboj that lost their premises and equipment during the floods. With these six grants valued at BAM 276,413.64 FARMA assisted farmers to sustain 301 full time and 135 seasonal jobs.

GRANTS SUMMARY

Sector	No. of Grant Awards	Total Value (BAM)	Avg. grant amount	% Total
MAP	5	133,905.87	26,781.17	18
F&V	11	423,256.40	38,477.85	58
Dairy	5	141,015.00	28,203.00	19
All	1	28,381.00	28,381.00	5
Total	22	726,558.27	33,025.38	100.00%

Overall, as of the end of August 2014, BAM 3.6 million (US\$ 2.5 million) in grant funds available were fully disbursed. Total awardees' contribution amounted to BAM 8.3 million (roughly 2 BAM on each 1 BAM in grants).

GRANTS SUMMARY

Geographic Coverage	No. of Awards
Federation BiH	17
RS	5
Total	22

At the end of the fifth project year, all available grant funds were committed. The effects of the grants program are highlighted under the sections describing individual sectors. Grants monitoring is an ongoing activity, and the project will continue to report on impacts of grants as the data become available (i.e. as the financed project come online). Also in the coming period all grants are expected to be closed.

GRANTS SUMMARY

Type of Organization	No. of Awards
Private Company	11
Cooperative	5
NGO	1
Association	3
Craft Organizations	2
Public Educational Institution	0
Total	22

SUBCONTRACTS

In the fifth year, the project committed most of available subcontract funds to support different activities that will produce an output or products that fit into the larger scheme of the project. FARMA entered into 14 subcontracts of which two were with regional and 12 with local organization.

The table below shows subcontracts committed during the period:

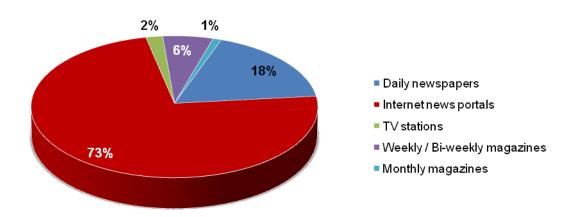
Contractor	Topic	Total Value (BAM)	Remaining for disbursement (BAM)
Zene za zene International	Support to training of women in MAP cultivation	40,180.00	14,180.00
Agency for Cooperation, Education and Development, Banjaluka	Support to training of women in MAP cultivation	41,850.00	18,850.00
Veterinarsko stocarski centar Banjaluka	Training of Dairy farmers on Artificial Insemination of Dairy Cows	13,580.00	0.00
Agency for Cooperation, Education and Development, Banjaluka	Support to creation of women entrepreneurship in rural areas through MAP cultivation and processing	69,970.00	39,970.00
Agency for Cooperation, Education and Development, Banjaluka	Improvement of Business Skills of Agricultural Producer Organizations	8,135.00	0.00
Revicon	Improvement of Business Skills of Agricultural Producer Organizations	15,985.00	0.00
REZ	Improvement of Business Skills of Agricultural Producer Organizations	7,630.00	0.00
Kosnica doo	Increase of awarness on importance of pollination among beekeepers and fruit growers	52,096.80	34,096.80
Poljoprivredni fakultet Sarajevo	Raspberry Demo Plot	40,456.50	8,456.50
Agrolink Sarajevo	Market Information System	30,072.22	14,072.22
Agency for Cooperation, Education and Development, Banjaluka	Improvement of Business Skills of Rural Women	16,720.00	0.00
MEGAL Slovenia	Improvement of dairy products	32,672.74	0.00
Zene za zene International	Support to creation of women entrepreneurship in rural areas through beekeeping combined with MAPs cultivation	57,183.00	11,183.80
Zavod za zdravstven varstvo, Slovenia	Support to FSA in implementation of the Official Control according to (EC)No 882/2004/EC	27,416.04	0.00
TOTAL:		453,947.30	140,809.32

MARKETING SUPPORT

Given the strong connection with promotion and marketing across USAID/Sida FARMA activities, a marketing component was integrated into the sectoral work. Below is a list of major marketing activities completed during the period, which are also covered under the appropriate sectoral sections.

Between September 2013 and August 2014, the USAID/Sida FARMA project recorded 324 appearances¹⁵ in the local electronic and print media. The majority of these appearances were in the key internet news portals, followed by daily newspapers. The breakdown is presented below:

USAID/Sida FARMA Media Presence (Sep 2013 - Aug 2014)



The numbers above present only a portion of media appearances as it is based on monitoring of major media or major news shows during prime time (especially for TV). Quite often the TV stations covered the event, but the reportage was placed in agricultural shows or news outside of prime time (given that the topic is agriculture), which was not covered by media clipping agency.

Extensive support was also provided to POs in terms of preparing press releases, giving media statements and organizing events attractive to media. Given the lack of budgets for mass advertising, many companies benefited from this low-cost promotional tool.

Additionally, the project conducted the following marketing support activities for producer organizations:

DAIRY

 Successful organization of the Cheese event at Sarajevo Holiday Market 2013/2014, promoting the gourmet cheese from Bosnia and Herzegovina. A selection of 10 types of cheese from all over BiH was presented to hotels and restaurants, media and VIP guests (staff of US, Swedish and Czech embassy and development projects). Trappist from

¹⁵ Monitoring by Kliping d.o.o., Sarajevo, Bosnia and Herzegovina (www.kliping.ba)

Banja Luka was awarded as the best traditional BiH cheese, and Tesanj cheese with nettle was chosen as the best new cheese. Short video about the event is available at http://goo.gl/akoq29

• In July 2014, Natural Park "Blidinje" near Jablanica / Posusje was visited to discuss possible marketing assistance, related to the production of vegetables, cheese and other products. Help is needed with brand development and graphic design.

FRUIT AND VEGETABLE

- In November 2013, delivered a presentation during the F&V Round-table in Brcko on "Promotion and Exports of Fresh Fruit and Vegetables", which was held during the Brcko General Fair (organized by BiH FTC / BH EPA, SIPPO and FARMA).
- Completed a small promotional video for Kuca prirode, leader in the production of natural fruit and vegetable juices (posted at http://goo.gl/bgt8dz).
- Completed the preparation of Fruit and Vegetable catalogue of exporters, in cooperation
 with the BiH Foreign Trade Chamber and SIPPO. In the final version of the catalogue 35
 exporters are presented. The catalogue is translated to English and German, printed and
 ready for distribution at Fruit Logistica fair in Berlin (5-7 Feb). Electronic version of the
 catalogue is available at http://goo.gl/XUMEVW.
- In January 2014, delivered a presentation on export marketing to 30 companies from the fruit and vegetables sector, during the workshop in Sarajevo organized by BiH Foreign Trade Chamber and SIPPO.
- In March 2014, delivered a presentation in Mostar to fruit and vegetable producers from Herzegovina, about key foreign trade data in this sector. This workshop was organized with the BiH Foreign Trade Chamber and SIPPO.

MAPS AND HONEY

- Supported the promotion of the BeeFest in Sarajevo, held from September 11-15, 2013.
- In October 2013, completed the brochure for honey exports to the EU. The brochure introduces potential distributors and buyers to the honey sector in BiH, and provides basic information about 4 major honey processors (Apimed, Herzeg Med, Medicom and Zalfija). Printed 200 copies before the fair in Sweden (electronic version is available at http://goo.gl/80hLze).
- Investigated opportunities for exports of honey to Sweden and Denmark. Contacted B&H
 and native businesses, sent links for downloading honey and MAP catalogues. Received
 interest for honey from Plivit Trade AB, Bosnian company in Sweden, who is the largest
 distributor of South-European products in Scandinavia. Sent samples and price offers for
 honey and natural juices.
- Visited Natural Products Scandinavia and Nordic Organic Food fairs in Malmo, Sweden, Oct 20-21st 2013, with 7 POs. In addition to establishing over 60 business contacts, current trends in the Scandinavian health and beauty market were examined. A small market research was also conducted in shops in Malmo and Copenhagen (Denmark). Based on the fair analysis, the recommendation is to return as exhibitors next year.
 - Top contact for honey is English company Ogilvy's, which is specializing in distribution of specialty honey in UK and the region. Catalogue with some samples were given to this company at the fair and the additional samples and price offers will be sent by mail. The owner of the company is planning to visit BiH in September 2014 (after several delays).
- Provided small support for the event with Women for Women International in Brijesnica promoting the results of MAP cultivation schools (November 2013).
- In March 2013, completed the Manual for collection of MAP & mushrooms (design through STTA work). Calendar for MAP collection was completed and printed in June.
- A round-table was organized in Banja Luka on May 15, talking about the MAP sector as an employment generator.

- In June 2014, delivered a presentation on Branding, Packaging and Promotion to about 30 farmers in Cazin (mostly beekeepers and some fruit growers).
- Tea Festival in Sarajevo in June 2014 was supported on a minor scale.
- July 2, 2014 in Sarajevo: Round table on "Immortelle in Bosnia and Herzegovina" was organized with BiH Foreign Trade Chamber. This event generated strong media interest in immortelle production in BiH; the coverage included a 5 page article in Business Magazine, as well as TV coverage by Al Jazeera Balkans.
- July 22, 2014 in Foča: US Embassy Charge d'Affaires visited Sezona doo, FARMA grant recipient and exporter of MAP (mostly wild mushrooms).

EU INTEGRATIONS & STANDARDS

Successful organization of NRMP event in November 2013, promoting the results to date
in the area of supporting veterinary capacities. 18 media attended the event; the short
promotional movie was prepared in time for the event (publicly available at
http://goo.gl/A7kUm7).

OTHER ACTIVITIES

- Seven POs exhibited at the WorldFood fair (GIDA) in Istanbul, Turkey between 5 and 8 September, 2013. Companies presented products made from milk, meat, medicinal and aromatic plants. Over the four days, BiH stand attracted numerous visitors, including distributors from Turkey and the Middle East region. In addition to excellent contacts developed, some companies signed preliminary contracts and the other found potential investors.
- In September 2014, successfully organized the FARMA Day at the US Embassy. 14 POs exhibited their products and the total sales were about 8,500 KM. Prepared posters about key FARMA accomplishments per sector, as well as PO brochure.
- Supported the organization of two promotional events for AgroLink (promotion of AMIS and Traceability). The events were held in Sarajevo (Sep 12) and Banja Luka (Sep 25). A total of eleven media attended these events.
- Supported the presentation of the FARMA project and Ag Institute from Bihac at the EKOBIS fair held in Bihac, September 12-15. Key results were presented to media and public.
- Supported the USAID booth at the Sarajevo Diplomatic Bazaar, held on December 8, 2013. Seventeen FARMA POs donated their products for USAID to sell at this event and all sales proceedings went to charity.
- Supported FARMA POs who exhibit at Sarajevo Holiday Market 2013/2014 (Assn of BiH Cheese producers, Eco Line, Lamaruz, Okusi Hercegovine). Most effort was made to support the cheese house, exhibiting some 20 types of cheese from members across the country. Survey for the best traditional and new types of cheese was implemented among the visitors of SAHM; Some activities were designed for kids and linked with Association's Facebook profile.
- Processed information on foreign trade between 2009-2013 for FARMA supported subsectors. Completed additional analysis for the dairy and F&V sectors. Identified bestsellers and leaders in export – this information will be used for planned promotional events.
- FARMA participated at 2014 Kids Festival in Sarajevo, during the Happy day sponsored by USAID (June 8). Three stands were organized: Beekeeping, Natural cosmetics and Vegetable planting; various promotional materials were distributed. Children reactions to these stands were excellent.
- In response to flood recovery needs, marketing specialist was also assigned with coordination of activities in municipalities Maglaj, Zepce and Zavidovici. Local producer organizations and municipalities were visited in order to assist in preparation of the four grant applications (July-August 2014).

POST-FLOOD RELIEF AND RECOVERY RESPONSE

CONTEXT

During mid to late May 2014, Bosnia and Herzegovina (BiH) experienced severe floods, which were caused by the heaviest rainfall in 120 years of recorded weather measurements. Thousands of people were forced from their homes.



Areas not directly affected by the flood waters were severely damaged by the land slides. Željezno polje, a small community in Central Bosnia, was severely damaged. As we can see from this areal image, the entire side of a hill collapsed, destroying roads, infrastructure and land. (credits: Klix.ba)

Based on the geography and topography, the types of floods can be divided into: i) Gradual inundation in plains along rivers, ii) Flash floods with devastating impact on agricultural resources, as water flows passed through the fields, and iii) Pluvial floods, as water accumulated on site into water ponds that eventually fed into rivers or seeped into groundwater. The unprecedented level of the Sava and Drina rivers prevented drainage of their tributaries, which flooded the surrounding areas. At the height of the disaster, in some areas flood defences collapsed and in others, the water overflowed the embankments.

Gradual inundation, while typically less destructive in nature, accounts for a much larger percentage of the flooded areas than other types of flooding, affecting a significant number of households residing in the plains. In most cases the water level peaked in two to eight hours. The affected population had sufficient time to protect their most valuable assets, although there were few locations with sufficient elevation to evacuate safely.

On the other hand, flash floods that have affected limited areas were far more destructive. Flash floods left little time to react and protect valuables, as affected people mainly aimed to save themselves. Some areas were also affected by landslides subsequent to the soil

saturation. While the overall area affected by flash flooding is relatively small in surface, the impact on affected individual households that have lost homes and livelihoods is extremely high.

The devastating floods have severely affected agricultural producers particularly in the north-eastern, east, central and northern part of Bosnia and Herzegovina. Floodwaters caused over 2,000 landslides across BiH, spreading damage across many towns and villages. The UN Food and Agriculture Organization (FAO), which led the preparation of the flood impact assessment on the agricultural sector, established the preliminary damage estimate at approximately BAM 200 million.

A total of 30 municipalities in the Republic of Srpska and a total of 22 municipalities in the Federation of Bosnia and Herzegovina were affected. About 70,000 hectares of land were flooded causing significant damage to agricultural crops — particularly cereals and vegetables. On average, the flooded area represents 17 percent of the total planted area in the affected municipalities/cantons. In addition, some agricultural service providers have been flooded, including the Agricultural Extension Service (PSS) Doboj, the Agriculture Institute in Banja Luka, and some veterinary services, which impedes their action in the field.



Clean-up of dead animal carcasses at Borojević farm in Šamac. About 480 dairy cows were lost in a matter of couple of hours, a loss exceeding BAM 1.4 million. (credits: AP)

Most of the damages are being absorbed by a relatively small number of rural residents who have suffered significant setbacks. The damages presented here do not take into consideration damages to the infrastructure and assets not linked to agriculture (houses, furniture, vehicles etc.). The breakdown of damages, according to the FAO, is summarized in the table below:

Entities	Damages (BAM)	% of Total
FBiH	91.737.807,79	44.94
RS	105.553.178,30	51.71
Brcko	6.804.832,10	3.35
Total BiH	204.095.818,19	100

The most affected sub-sector is the crops sector. Details per type of productive sub-sector are given in the table below:

Crop	Lost Total (Ha)	Unit value(BAM/Ha)	Total (BAM)
Cereals	17 018	2 022	34 415 078
Maize	36 853	1 980	72 974 530
Vegetables	5 180	9 637	49 917 126
Fodder	7 754	256	1 984 138
Soya	1 550	1 146	1 777 215
Orchards	763	23 130	17 647 850
Berries	66	37 939	2 503 950
Total			181 219 888

The second most affected sector is the livestock sector as shown in the table below:

Livestock	Number	Value (BAM/head)	Total (BAM)
Cattle	954	3,000	2,862,000
Poultry	219,298	10	2,192,980
Pigs	8,127	200	1,625,400
Beehives	3,678	170	625,260
Small Ruminants	1,852	200	370,400
Equids	15	1,600	24,000
Rabbits	264	20	5,280
Total			7,705,320

The most affected areas, in terms of the percentage of planted agricultural land flooded, are presented in the map (next page).

The floods occurred at a very critical time in the agricultural calendar: one month before the harvest of cereals and after the maize planting. Farmers producing under greenhouses had already transplanted vegetables. Loss of agricultural perishables such as agricultural inputs e.g. stored animal feed, fertilizers, manure and plant protection is evident. Agricultural inputs which came in contact with the flood waters were washed away, contaminated, and rendered useless. Most affected are hay and silage in areas which were submerged for more than 24 hours. Significant quantities of agricultural equipment were also affected.

All items which the inhabitants were unable to move to higher ground were inundated. In some areas there has been damage to agricultural machinery and equipment and in certain cases some equipment including tractors, various attachments, and sprayers were lost. Much of the equipment will have to be recovered, cleaned, and restored. Animal pens were rendered unusable for the duration of the inundation, as well as for the duration of the

cleanup effort, due to the residual moisture in the walls and contamination. In some cases greenhouses were swept away by passing water flows and flash floods.

The effects of the inundation on agricultural production largely depended on the type of flood waters and the retention time. In areas where the water receded within 24 hours, damages to crops were reflected in reduced yields from direct inundation and follow-up fungal and bacterial diseases. In areas where the water stayed for 24 – 48 hours, most annual crops were completely lost. In areas where the water remained for more than two days at levels varying between 0.5 and 8 meters there was complete loss of annual crops and in some cases orchards. Losses of animals were relatively limited, affecting mainly small and enclosed animals and incidentally cattle.

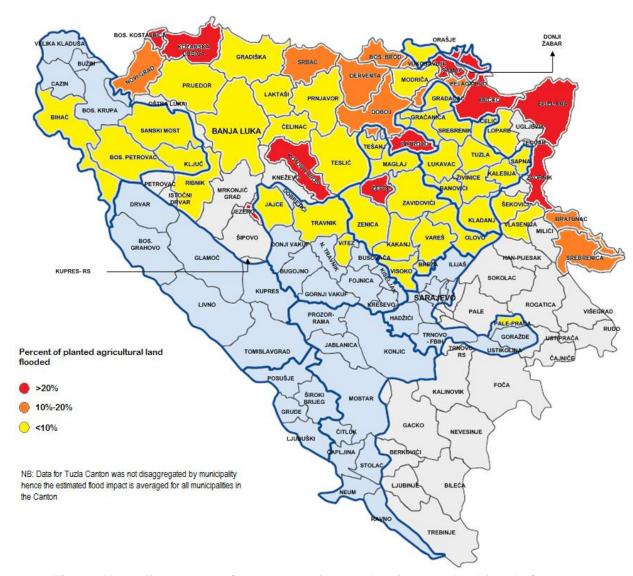


Figure: Most affected areas (percentage of planted agricultural land flooded)

Animals have been evacuated to collective centres. Others have been evacuated to neighbours and relatives. Losses of cattle are very limited (below 1 percent) in the affected municipalities. Losses of pigs, small ruminants and in particular poultry in all affected municipalities are also limited, although the effect is concentrated in certain villages where a high level of losses was recorded (up to 80 percent of the poultry). The effect of floods on the poultry industry is somewhat higher than other sectors as the losses are proportionally

higher. The hatchery in Doboj faced significant losses that will slow down the industry recovery.

Stress in animals, followed by health issues such as mastitis, diarrhoea, and pneumonia etc., has immediately but temporarily disrupted their productivity. Overall, the agricultural sector in the affected areas is expected to stagnate as farmers will tend to repair and rebuild rather than develop. A map of FARMA-assisted beneficiaries in affected regions can be found here.

As stated by the FAO, an adequate response to floods must not only meet urgent recovery needs, but also address underlying vulnerabilities. Farmers affected by floods need to be supported in order to facilitate a quicker recovery, re-establish their normal livelihoods, and enhance their resilience to future shocks. A Recovery Plan must be based on immediate response to address urgent needs to maintain and restore the productivity in the sector and income of the affected population. Lost assets such as storage facilities (barns, silos, cold storage, etc.), farm buildings (stables, animal pens, etc.) and lost equipment will have to be rehabilitated, improved and restored. Similarly, damaged farm roads will have to be repaired and improved to reduce production and marketing costs. Within the crops sector, in the short-term, priority should be given to restoration of the production capacity in cereals (wheat, maize, barley, triticale) and fodder crops, and horticulture.



Photo: People being evacuated from affected areas by any available means (credits: Dado Ruvic/Reuters)

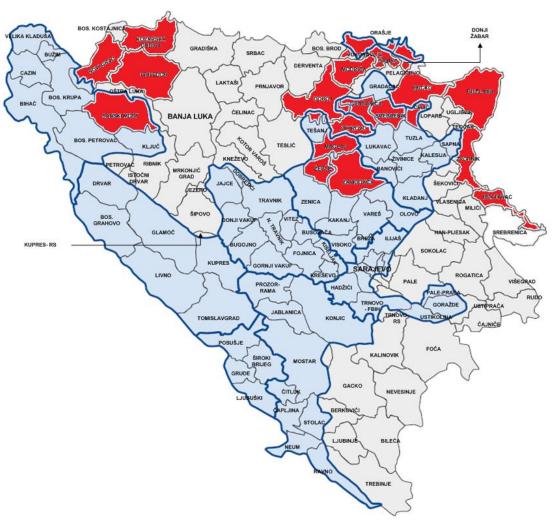
Revitalization and re-plantation of orchards will also be essential, although at least 2 -3 years will be necessary to recover to pre-disaster production capacity levels. For cattle, small ruminants, and pigs, the strategy for recovery should aim at maintaining the existing stock until the resumption of production and availability of fodder. The FAO has estimated that the overall recovery and reconstruction cost is approximately BAM 88.9 Million, of which 43 percent (BAM 38.3 million) is for the immediate response and early recovery needs.

FARMA ACTIVITIES IN RESPONSE TO FLOODS AND MITIGATION OF DAMAGES

"This is the first assistance I received and I have not received any other help since the floods. The help means a lot to me because I will be able to feed the livestock with the feed concentrate that I received, and the seed that I received will be planted in autumn so that I have animal feed during spring. Without this help, I would have been unable to feed the livestock."

Ms. Suvada Avdic, dairy farmer

In anticipation of additional funding provided to the FARMA project (est. US\$ 2.26 million for grants), which is financed by USAID and Sida, the project invited interested Producer Organizations (POs) to apply for funding for flood relief and recovery. The goal of this assistance is to help restore the production and income of the most affected farmers, and reconnect rural communities and markets. The Flood relief and recovery fund is intended to assist producers in the following municipalities: Bijeljina, Bratunac, Brčko, Čelić, Doboj, Doboj Istok, Doboj Jug, Domaljevac, Donji Žabar, Gračanica, Kozarska Dubica, Maglaj, Modriča, Novi Grad, Odžak, Orašje, Petrovo, Prijedor, Šamac, Sanski Most, Srebrenik, Vukosavlje, Zavidovići, Zvornik, and Žepče.



FARMA aims to support producer organizations that will help farmers to recover their production and sustain employment and income. Examples of such grants are: purchase and installation of greenhouse and irrigation systems, animal feed concentrates, agricultural

tools, hatching eggs, cages and chicken feeding equipment, and beehives lost in floods; replanting of forage crops for animal feed, berry orchards and other plantations. Support may also be provided for flood-affected POs that provide services critical to the agricultural value chain, such as agricultural inputs for primary production, or agricultural and veterinary services. The following sections summarize activities on flood assistance and recovery in each sector, undertaken so far. It is expected that the pace and the volume of activities will become increased sizably with appropriation of funds.

DAIRY SECTOR

FARMA's Dairy Team has been actively working with ministries, institutes, and farmers' and producers' associations, by providing support to mitigate the consequences of the floods through instructions, guidance, technical assistance, and personal help.



FARMA's Dairy Portfolio Manager, Dr. Midhat Glavić helps the clean-up efforts at the stables of Muhamed Mehmedović, a project beneficiary. Fortunately, the livestock on this farm survived the floods.

96 tons of animal feed and forage seeds provided to 78 farmers from Doboj area For instance, FARMA prepared materials on "Disinfection of barns and barn equipment for flooded areas" in cooperation with the Ministry of RS and FBiH Veterinary Chambers. This document can be found on www.bosniafarma.ba (local language only). The project also publicized all other recommendations, from reputable sources, for agricultural producers from flooded areas.

The project provided immediate assistance to 78 dairy farmers from Doboj area, by delivering 96 tons of animal feed and

forage seeds, to enable farmers to maintain milk production at current levels, and to restore production of animal feed, which would allow them to maintain their herds throughout the coming winter season. Moreover, the 90-day emergency supply of animal feed was provided

to members of the Association of Dairy Farmers from Šamac, along with forage seeds sufficient to recover 84 hectares of productive land.

In addition, FARMA assisted 18 milk producers who have suffered the greatest damage during the May floods in Zvornik area, by providing them animal feed and forage seed material. Mr. Dževad Galjić, Director of the Agricultural Cooperative "Prunus" said that this assistance means a lot for dairy producers and added "This will help the farmers to restore production. Farmers are receiving assistance in animal feed or concentrate for dairy cows and autumn seed material in value from BAM 1,000 to BAM 5,000 KM, depending on the herd strength and the production volume." The total value of the grants for Zvornik farmers is BAM 50.000.





Distribution of animal feed concentrate to dairy farmers in Bratunac (Srebrenica region)

"During the period of floods, almost 100 dunums (10 ha) of maize, wheat and clover, were flooded a number of times. Clover was completely destroyed; 60 percent of wheat was destroyed; and I had to replant maize twice. Without the help of the donors, I would have to shut down my farm on which I have 15 cows."

Osmo Ibrić, farmer Špionica village, near Srebrenik

FRUIT AND VEGETABLE SECTOR

The Fruit and Vegetable team coordinated organization of info-sessions for farmers on the FARMA recovery fund and planned activities on revitalization of agricultural production with municipalities from North Eastern BiH. Additionally, FARMA presented information on the recovery fund and planned activities during the 41st Gradacac Agricultural Fair. More than 50 attendees were present at the information session. The team had been working intensively on processing grant applications to help the farmers most affected by the floods and landslides. The focus of the assistance is cofinancing recovery of greenhouses, planting berry fruits, and installation of irrigation systems. At this stage, activities are on track, and it is expected that the farmers will be able to successfully complete the sutumn planting.

FARMA also provided information on the USAID/Sida GOLD project's call for proposals, and a call for proposals focused on recovery activities for agriculture business in BiH issued by Helvetas SI BiH funded by the Swiss Government, to FARMA's POs.



Berry orchard of Ms. Mevla Jusufović destroyed by the land-slide in Željezno polje

MAPS AND HONEY SECTOR

The MAPs/Honey team had been working on assisting bekeepers that have lost beehives as a result of floods. Several grant applications are anticipated to be approved. In addition, FARMA assisted MAP producers who have suffered the greatest damage during the May floods in Bijeljina (recovered 4 ha of cultivated lavender fields) and Žepče area (recovered 3 ha of cultivated assorted MAPs) by providing technical assistance on replanting and recovering of existing land plots.



Beehives destroyed by the floods

CROSS-CUTTING SUPPORT

Facilities of Agricultural Extension Services in Doboj were completely destroyed by the May floods. Reinstating the Extension Services has been assisted by USAID/Sida FARMA project, which supported the purchase of computer equipment. This is important assistance, not only for the agricultural extension service, but also for the more than 5,000 farmers who use this service, and who have themselves suffered enormous damage caused by the recent floods. Charge d'Affaires of the U.S. Embassy, Mr. Nicholas Hill, formally donated new equipment to Agricultural Extension Services in Doboj, while touring the facility with the Mayor of Doboj Mr. Obren Petrovic.

USAID i "FARMA" pomažu poljoprivrednicima u Srebreniku

Podijeljeno 146 tona stočne hrane

Američka organizacija za međunarodni razvoj USAID i Švedska humanitarna organizacija "FAR-MA", posredstvom Poljoprivredne zadruge "Poljoind" Srebrenik, dodijelili su 146.000 kilograma stočne hrane poljoprivrednicima s područja ove općine.

Prema riječima Nedžada Ibrišimovića, direktora Ukupna vrijednost donacije je 70.000 KM

"Poljoinda", pomoć je dobilo 70 poljoprivrednih proizvođača, a od ukupno 146 tona stočne hrane, 46 tona je dodijeljeno vlasnicima farmi muznih krava, 88 tona stočne hrane su dobili uzgajivači tovnih junadi, a preostalih 12 tona raspodijeljeno je uzgajivačima ovaca i koza. Ukupna vrijednost donacije iznosi oko 70.000 maraka.



Pomoć dobilo 70 farmera iz Srebrenika

Zahvalnost donatorima

- Tokom prošlog ljeta u više navrata poplavljeni su mi kukuruz, pšenica i djetelina na ukupnoj površini od blizu 100 duluma. Djetelina je u potpunosti uništena, a pšenica je uništena na više od 60 posto zasijane parcele, dok sam kukuruz morao dva puta presijavati. Da nije pomoći donatora, morao bih zatvoriti svoju farmu na kojoj uzgajam 15 tov-



Ibrić: Uništena pšenica nih junadi - ističe Osmo Ibrić, farmer iz Špionice kod Srebrenika.

Donirana stočna hrana pomoći će srebreničkim farmerima da lakše saniraju ogromne štete koje su poplave u maju i avgustu nanijele njihovim poljoprivrednim usjevima.

Putem posebnog fonda, vlade Švedske i SAD pružaju pomoć poljoprivrednim gazdinstvima koja su pretrpjela najveće štete od poplava. Pomoć u stočnoj hrani dobit će poljoprivrednici u 25 općina širom BiH, a u fokusu su one općine koje su pretrpjele najveće štete odpoplava. Putem ovog fonda bit će podržano oko 1.500 gazdinstava širom BiH, a zahvaljujući ovoj podršci trebalo bi biti sačuvano oko 2.900 radnih mjesta u poljoprivredi. O.M.

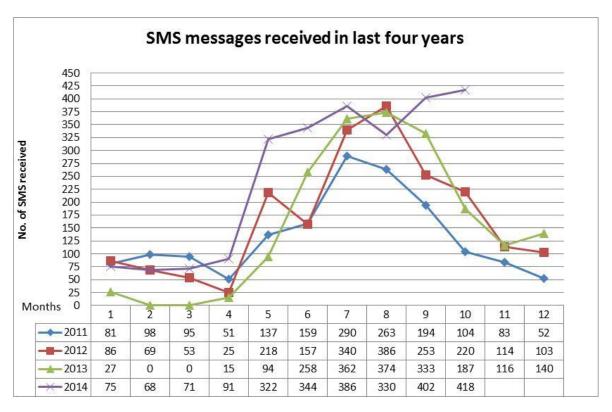
One of many articles in the print media on U.S. and Sweden's assistance to BiH farmers via USAID/Sida FARMA project's flood recovery grants.

MARKET INFORMATION

BACKGROUND

During the early months of the FARMA project, discussions were held with the RCI project and SWG regarding market information. It was agreed that this was an excellent candidate for regional cooperation and an opportunity to engage and work across countries. Several countries of the region currently collect wholesale agricultural prices and publish them on the Internet. FARMA planned to gather and disseminate this regional information to BiH agriculture. It was agreed between RCI and SWG that since FARMA would do this, it would be worth disseminating the compiled information to other countries of SWG in anticipation that either RCI or a future regional project would take into consideration the option of wider support for this activity, including generating prices from countries of whom do not currently use this technology.

In 2013/2014, FARMA supported Agrolink to collect and disseminate agricultural price information. The objective is to improve market efficiency by gathering daily prices from the principal wholesale markets of the country and disseminated the same day both via AgroLink web portal and through SMS messaging. Besides the wholesale prices for BiH, the objective is to provide public access to current wholesale prices from countries of the surrounding region. The objective is to utilize these reports in the best possible way, but also to consider how different analysis of price history, trends, etc. could be developed and offered to different institutions and stakeholders. As seen below, the utilization rate of SMS messages has steadily increased over time (particularly 2014 in relation to 2011), which indicates that this service is appreciated by users.



RESULTS AND ACTIVITIES

Wholesale price data collection and whole sale price reports

Local (BiH) market price information

AgroLink has continuously collected data on wholesale prices of fresh fruits and vegetables from four wholesale markets including Sarajevo, Banja Luka, Capljina and Arizona/Brcko. The data collection in the field have executed by four local reporters who have been working for AgroLink last four years. Market reports each morning by 8 a.m. to AgroLink's office via fax where AgroLink operator enters data into the CPD software. The software generates the daily report which is uploaded on the web portal by 9 a.m. each working day.

Albania market

Since November 2013, Albania is not providing data on wholesale prices for fresh fruits and vegetables. Hence no reports are being created for Albania.

Regional markets – Croatia, Montenegro and Serbia

AgroLink collects data from Croatia (www.tisup.mps.hr), Montenegro (www.amiscg.org) and Serbia (www.stips.minpolj.gov.rs) and enters the collected data into the CPD software. Then the weekly report for BiH, Croatia, Montenegro and Serbia is produced and distributed to SWG, FARMA and other relevant stakeholders from the AgroLink's distribution list. In this agricultural season, AgroLink made all these reports available in PDF format through its web portal (www.agrolink.ba) in its section so called Baza znanja/Regional Market Monitor 2014. The reports are available for downloaded free-of-charge.

It should be noted that the Serbian national MIS provider- "STIPS"- was not publishing any reports in the period of January-April 2014. Hence, AgroLink could not produce any reports for this market during that period. Since that time, the data became available. These are being regularly collected and presented in weekly reports "Regional Market Monitor."

Prices of agricultural commodities in BiH available via SMS messages

Over the reporting period, AgroLink continued to offer its SMS service for BiH market. As one would expect, the number of price inquiries fluctuates, depending on the approaching agricultural season (see graph, previous page)- as the agricultural season approaches, the number of inquiries peak, and vice versa. In parallel, AgroLink continued dissemination of information on SMS service and wholesale prices of selected products, while expanding its database of farmers with new 500 contacts that are added to the SMS list.

Promotion and information dissemination

AgroLink continued dissemination of Market Information System (MIS) brochures (an endeavor supported by the USAID/Sida FARMA project in earlier stages of MIS implementation) across the country mostly to the farmers, SMEs, cooperatives, wholesale/green markets (such as Čapljina, Banja Luka, Arizona, etc.), and grocery shops. Over 1,500 brochures were disseminated.

Additionally, AgroLink conducted several visits to SMEs, cooperatives and farmers across the country and held presentations of MIS and distributed its leaflets (ZZ "AT" D. Vakuf, Šumski Plod, Tari d.o.o., ZZ Brka Brčko, Maočanka Komerc, Agroimpex, VIP Krajine, etc.).

ANALYSIS OF THE PREVAILING MARKET PRICES OF CERTAIN AGRICULTURAL COMMODITIES AFTER FLOODS¹⁶

Minimum and maximum prices of specific agricultural commodities were obtained in four major wholesale agricultural markets in Bosnia and Herzegovina (Sarajevo, Banja Luka, Čapljina, and Arizona market-Brčko) over the course of 2013 and 2014. Data were collected by the Agrolink company. USAID/Sida FARMA project conducted an analysis of the data, to ascertain the validity of speculations that the food prices in Bosnia and Herzegovina will increase significantly as a result of flood devastation (flooding started on May 15, 2014).

We decided to analyze prices of four specific agricultural commodities (strawberries, potato, onion, and peppers). Minimum and maximum prices observed in all four wholesale markets were averaged (for a week) for both 2013 and 2014, and then compared. The time period under consideration was from the third week of May¹⁷ through first week of June (4 weeks, for both years, to ensure time-period compatibility). The results of the analysis are summarized below.

Strawberry

Over the course of this time period, the lowest recorded price per kilogram of strawberries was BAM 1.00. This price was recorded three times in 2014, while in 2013, the lowest price never slid below the BAM 1.10. The maximum price in 2013 reached BAM 4.00 at one instance at the beginning of the season, while in 2014, it reached BAM 3.80, but did not cross that threshold. Average prices (in the analyzed period) in 2013, moved in the range of BAM 2.01- BAM 2.90, while in 2014, the average price range was between BAM 1.33 and BAM 2.93.

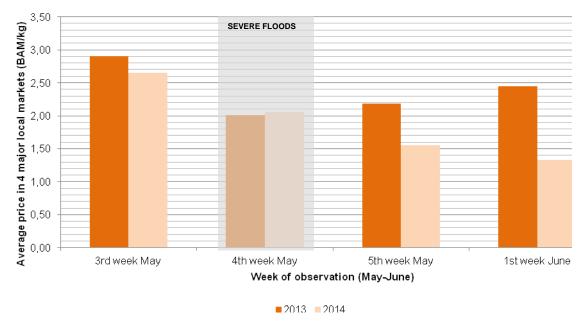
As we can see from the graph (next page), average price of strawberries was higher in 2013 than in 2014. The average difference is BAM 0.49, i.e. price of kilogram of strawberries in 2014 is lower (on average) by this amount than the price in 2013. Overall price difference in the observed period is statistically significant¹⁸, i.e. observed prices in 2014 (mean= BAM 1.898) are significantly lower than those in 2013 (mean = BAM 2.353).

¹⁶ Analysis and statistical discussion produced by FARMA's M&E Specialist, Zoltan Milić

¹⁷ Week of May 13-17 in 2013, and week of May 12-16 in 2014

¹⁸ A paired-sample (n=30) t-test, conducted at 5% confidence level (α=0.05) indicated that the difference was significant (t=2.601; p=0.014<0.05).

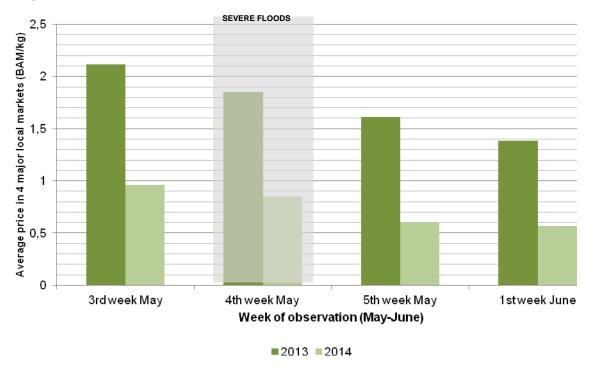
Graph: Average price of strawberry in major local markets- price comparison



Spring Potato

Over the course of the time period under consideration, the lowest recorded price per kilogram of spring potatoes was BAM 0.30. This price was recorded once in 2014, while in 2013, the lowest price never slid below the BAM 1.00. The maximum price in 2013 reached BAM 4.00 at one instance, while in 2014, it never went above the BAM 1.40 threshold. Average prices (in the analyzed period) in 2013, moved in the range of BAM 1.38- BAM 2.11, while in 2014, the average price range was between BAM 0.57 and BAM 0.96.

Graph: Weekly average price of potato in major local markets-comparison

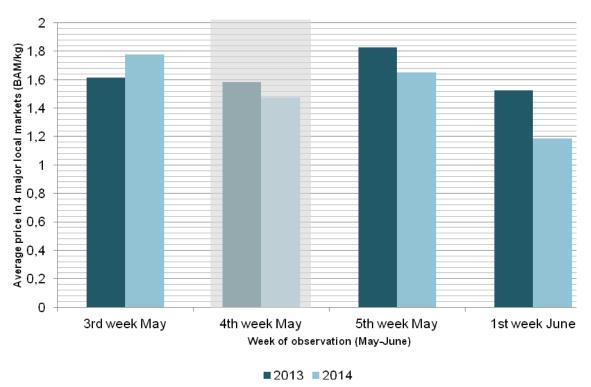


As we can see from the graph (previous page), average price of potatoes was higher in 2013 than in 2014. The average difference is BAM 1.07, i.e. price of kilogram of potatoes in 2014 is lower (on average) by this amount than the price in 2013. Overall price difference in the observed period is statistically significant¹⁹, i.e. observed prices in 2014 (mean= BAM 0.745) are significantly lower than those in 2013 (mean = BAM 1.717).

Spring Onion

Over the course of the time period under consideration, the lowest recorded price per kilogram of spring onion was BAM 0.90. This price was recorded three in 2013 and two times in 2014. The maximum price in both 2013 and 2014 reached BAM 3.00 at one instance. Average prices (in the analyzed period) in 2013, moved in the range of BAM 1.52- BAM 1.82, while in 2014, the average price range was between BAM 1.19 and BAM 1.75.

Graph: Weekly average price of spring onions in major local marketscomparison SEVERE FLOODS



As we can see from the graph above, average price of spring onion was higher (for most of the four weeks under observation) in 2013 than in 2014. The average difference is BAM 0.20, i.e. price of kilogram of potatoes in 2014 is lower (on average) by this amount than the price in 2013. Overall price difference in the observed period is **not** statistically significant²⁰, i.e. observed prices in 2014 (mean= BAM 1.522) are not significantly lower than those in 2013 (mean = BAM 1.683).

Peppers

Over the course of the time period under consideration, the lowest recorded price per kilogram of peppers was BAM 1.50. This price was recorded three in 2014, while in 2013, the lowest price never slid below the BAM 2.00. The maximum price in 2013 reached BAM 6.20

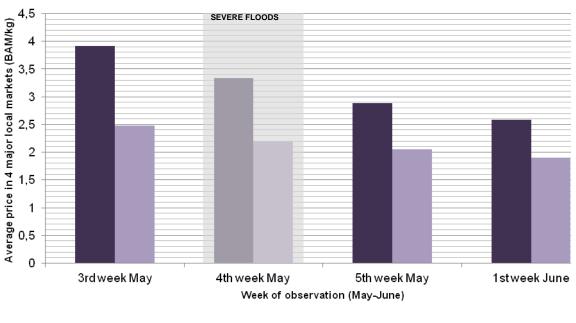
 $^{^{19}}$ A paired-sample (n=30) t-test, conducted at 5% confidence level (α =0.05) indicated that the difference was significant (t=10.436; p=0.000<0.05).

A paired-sample (n=30) t-test, conducted at 5% confidence level (α =0.05) indicated that the difference was not significant (t=0.758; p=0.445>0.05).

at one instance, while in 2014, it never went above the BAM 4.00 threshold. Average prices (in the analyzed period) in 2013, moved in the range of BAM 2.58- BAM 3.92, while in 2014, the average price range was between BAM 1.90 and BAM 2.47.

As we can see from the graph above, average price of peppers was higher in 2013 than in 2014. The average difference is BAM 1.13, i.e. price of kilogram of peppers in 2014 is lower (on average) by this amount than the price in 2013. Overall price difference in the observed period is statistically significant²¹, i.e. observed prices in 2014 (mean= BAM 2.153) are significantly lower than those in 2013 (mean = BAM 3.133).

Graph: Weekly average price of peppers in major local marketscomparison



■2013 ■2014

Conclusion

Despite significant public outcry, there was no sufficient evidence (at the time under observation), to corroborate assertion about increase in the price of agricultural commodities, used in human consumption. Analysis indicates that prices of analyzed agricultural commodities (strawberry, potatoes, and paprika) in 2014 (during and immediately after the flood) are significantly lower than in 2013, while no significant differences between prices of spring onions in those two years had been observed.

Obviously, it is too early to speculate on the price-movements thorough the end of the year, as the food prices in general are influenced by a number of factors beyond pure supply and demand, such as: fuel prices, trade policies, inflatory pressure, and consumer expectations (to name but a few). Hence, FARMA and AgroLink will continue to monitor market prices to ascertain the market trends.

FOR THE PERIOD 1 SEPTEMBER 2013 – 31 AUGUST 2014 FOSTERING AGRICULTURAL MARKETS ACTIVITY (FARMA)

 $^{^{21}}$ A paired-sample (n=30) t-test, conducted at 5% confidence level (α =0.05) indicated that the difference was significant (T=6.565; p=0.000<0.05).

COOPERATION WITH LOCAL INSTITUTIONS

This section does not report new or additional information from that provided in the body of the FARMA Annual Report. Rather, this section aggregates those elements from the rest of the FARMA Annual Report that specifically relate to the collaboration with local institutions.

STATE VETERINARY OFFICE

USAID/Sida FARMA has been providing support to the BiH State Veterinary Office to help improve the system of official control in relation to dairy products. Significant training was conducted of veterinary inspector, dairy farmers and processors. Further, representatives of the BiH State Veterinary Office (SVO) and the Departments of Veterinary Affairs of Entity Ministries of Agriculture attended a study tour in the Czech Republic. The goal of the study tour was to enable exchange of experiences of governmental personnel with representatives of the Czech Republic Department of Veterinary Affairs on the process of developing and implementing the National Residue Monitoring Plan (NRMP). The BiH visitors were able to observe the functioning of a software solution used in support of all activities related to implementation of the NRMP in the Czech Republic, including determination of sampling requirements through sampling analysis, data entry, and monitoring and tracking of results by the authorized institutions. Furthermore, comprehensive assistance is being provided to veterinary laboratories, in parthership with the State Veterianry Office and the Czech Development Agency. For further details of these activities please see the EU Integration and Standards section of this report.

BIH PLANT HEALTH ADMINISTRATION

In 2014, the USAID/Sida FARMA project, in collaboration with the BiH Plant Health Administration, started activities under the "Institutional support for certification and control of plant materials" project activity, which is implemented together with the Czech Development Agency. Furthermore, FARMA continued to support the Administration is relation to overcoming constraints for the export of potatoes to the EU. For further details of these activities please see the EU Integration and Standards section of this report.

BIH FOOD SAFETY AGENCY

USAID/Sida FARMA continued its provision of technical assistance and support to FSA, in order to strengthen their capacity in the areas of implementation of a monitoring program for food products, risk assessment, implementation of new legislation pertaining to official control of food and animal feed, as well as strengthening the analytical capacities of food laboratories. For further details of these activities please see the EU Integration and Standards section of this report.

BIH FOREIGN TRADE CHAMBER

USAID/Sida FARMA organized a joint exhibition of local companies for this year's Nordic Organic Food Fair, in coordination with the BiH Foreign Trade Chamber. FARMA also organied several workshops and roundtables together with the FTC.

ENTITY MINISTRIES OF AGRICULTURE, EXTENSION SERVICES AND AGRICULTURAL INSTITUTES

FARMA continues collaboration with Entiity Ministeries of Agriculture namely in relation to overcoming constraints for the export of potatoes and milk to the EU. FARMA also supported the RS Ministry of Agriculture, Forestry and Water Management in development of the RS Agricultural and Rural Development Strategy, which is broadly aligned with the EU Common Agricultural Policy (CAP). For further details of these activities please see the EU Integration and Standards section of this report.

GENDER EQUALITY

This section of the report does not report new or additional information from that provided in the body of the FARMA Annual Report. Rather, this section aggregates those elements from the rest of the FARMA Annual Report that specifically relate to the topic of project's activities in the domain of gender and minority equality.

FARMA and subcontractor Megal (Ptuj, Slovenia), in coordination with RS Ministry of Agriculture, municipalities Prnjavor and Teslić, agricultural cooperatives, and private firms, organized several theoretical and practical training sessions for cheese producers on the improvement of technologies, formulations, and development of cheese processing units in line with EU standards. During the practical training, a cheese tasting event was organized, where participants could bring their dairy products. The Teslić Women's Association presented their first cheese made in a cheese producing facility, equipped with the FAO's financial assistance and made operational with FARMA's technical assistance.





Training for women cheese producers in Ubosko village

The project also organized training for 16 cheese producers, mostly women from rural areas, in the village of Ubosko, near Ljubinje. During this training, Slovenian expert Ms. Majda Tumpej, presented production methods for yogurt, soft cheese and cheese spreads, and provided advice on how to improve production of traditional cheeses, such as sack cheese and semi-hard cheeses.

Production of medicinal plants is a promising agricultural activity. This is the area where the country records a positive trade balance, with exports of herbs and forest plants reaching BAM 28 million (roughly US\$ 19 million) in 2013. The latest assessment by FARMA indicates that the cultivated medicinal plants areas are increasing with around 600 hectares planted with various types of plants, with chamomile being the most dominant plant.

USAID/Sida FARMA has been funding ongoing implementation of four Schools to support women's entrepreneurship through MAP cultivation, MAP processing, and beekeeping for women in Bosnia and Herzegovina. The goal of these schools was to provide theoretical and practical training for at least 400 women from rural areas in the cultivation of medicinal and aromatic plants and beekeeping, with the goal of encouraging them to engage in commercial production.





MAP School participants in practical training

These programs were implemented by "ACED" (Banja Luka) and the NGO "Women for Women International" (Sarajevo), the local companies that partnered with FARMA in building the capacity of women as well as building their own capacity in project implementation. The participants had already been linked to markets, so they can become independent producers who generate income for their families.

One of the project beneficiaries, Mrs. Hanka Džebo, who participated in the MAP School organized by Women for Women International, established a plantation of medicinal and aromatic plants over half a hectare. She and her family are now planning to construct a drying facility and engage full-time in MAP production.

MAP SCHOOLS HIGHLIGHTS

After completion of four MAP cultivations schools (three implemented by Women for Women International, and one by ACED), the following results have been achieved:

- **380** rural women from entire country are now educated in the cultivation of MAPs;
- Currently, **72** of them are now actively involved in the cultivation and processing of MAPs, from which they derive new income;
- Each woman involved earned between **EUR 700 and 4,500** (depending on the size of the cultivated plot and yield attained) during the school program, as all the MAPs produced were sold;
- New parcels totaling **6.84** hectares of land are cultivated with MAPs (e.g. mint, melissa, marigold, basil, lavender, thyme, etc.) as of the end of the quarter.

Activities in this domain continued throughout the year with commencement of the "Support to creation of women entrepreneurship in rural areas through beekeeping combined with MAPs cultivation" program for 40 women. Participants in this program were graduates of earlier MAP Schools who now plan to increase their MAP cultivation, and add beekeeping and honey production. This project is being implemented in Doboj, Tešanj, Vitez, and Jablanica, despite significant flood damages to infrastructure in some of these municipalities (primarily in Doboj). Nevertheless, the attendees expanded their plots under cultivation, and receive three beehives which were placed in a number of locations to start the production of honey while intensive practical and theoretical training continued.





Scenes from practical training at MAP Cultivation Schools



In addition to these efforts, two local experts have been conducting practical training in the field, for farmers interested in MAP cultivation, and as a result of this effort, an additional 49.6 hectares of MAPs were planted.

The project also organized a number of two-day training seminars on project proposal writing for rural women throughout BiH during the reporting period. Trainings were held in Sarajevo, Tuzla and Prijedor, by the FARMA subcontractor "ACED," with the participation of 45 women representing 20 organizations from the central, north-east and north-west parts of BiH. As a result, 17 business plans have been developed with a total value of KM 348,051; and 10 business plans have been submitted for financing with a total value of KM 233,883.

Furthermore, training on "Importance and role of cooperatives" was also held for the staff of the Women for Women International organization. Finally, FARMA organized and held training for members of the Board of Directors of the cooperative "Žena" in Bratunac on the "Role of the managing bodies of the cooperative," and training for fruit producers from Kreševo, Kiseljak and Fojnica on the "Role of Associations in agriculture development" with Swiss Caritas. Moreover, training for women producers of Romanija sour cream ("skorup") Sokolac, Han Pijesak, and Rogatica was held in this quarter. Once these producers form their association, they will engage in the process to protect the geographical origin of the "Romanijski kajmak-skorup".

WORKING WITH YOUTH

This section of the report does not report new or additional information from that provided in the body of the FARMA Annual Report. Rather, this section aggregates those elements from the rest of the FARMA Annual Report that specifically relate to the topic of project's activities in the domain of working with youth.

FARMA seeks to engage youth in project activities both in the private sector and institutions.



BiH laboratory staff being trained by Czech experts

Current and future scientists and agronomists have benefited from FARMA-supported activities. For example, young laboratory staffs from Agriculture and Veterinary Institutes and Faculties have been included in comprehensive and intensive FARMA-organized trainings to develop and improve diagnostic and analytical methods. Also, students from the Agriculture Faculty in Sarajevo are conducting the graduate research on a berry demonstration plot which was established with the support of USAID/Sida FARMA and the Czech Development Agency.

The project also organized a training for dairy producers and cheese producers in cooperation with the Association of Cheese Producers in BiH in Fojnica. In total, 11 cheese producers and pupils from the Agriculture High School in Sarajevo attended this training. FARMA egaged Slovenian expert, Ms. Tumpej, who held a practical, hands-on training, allowing participants to try new methods and technologies first hand. After this training, the director of the Agriculture High School in Sarajevo extended an offer for future training to be held at the school facilities.

In addition, the USAID/Sida FARMA project took part in the Happy Day at Sarajevo Kids Festival, to teach children about agricultural production through several interesting activities. At the booth with natural cosmetics, kids were making natural soaps and gifts, and they learned about the importance of hygiene, especially hand washing. The booth with bees, where children could see the worker bees and the queen behind glass-casing, were particularly interesting and well-attended. Happy Day at the Kids Festival was supported by USAID Bosnia and Herzegovina, and two MAP POs, Matična mliječ Memišević (beekeeping) and AlmaDerm (natural cosmetics), took part in the Happy Day activities.



A small beekeeper proudly presents her beekeeper certificate at the Kids Fest in Sarajevo

ANNUAL INDICATOR UPDATE²²

FAR TAB	MA PERFORMANCE MONITORING LE	YEARLY TARGET (YEAR 5 – 2014)	LOP TARGET (Years 1-5 ½*)	Year 1 /			Actuals		Actuals 2-2011	Yea Actu 2013-	als	Aug	5 Est. 2014 -2013	LoP To	tal***	Accomplishment rate (actual results vs. target) LOP (Years 1-5
	PROJECT OBJECTIVE															1/2*)
1	Percent change in sales of participating producer organizations	15%	65%	T[1]:16%	F:4%	T:10%	F:16%	T:14%	F:11%	T: 11%	F: - 15%	T: 2%	F: 5%	T:56%	F:20%	86%
2	Change in employment in participating producer organizations	10%	45%	T:11%	F:11%	T:8%	F:- 13%	T:-6%	F:-8%	T: 12%	F:- 8%	T: - 2%	F:0%	T:2%	F:-21%	4%
3	Number of new products eligible to enter EU markets	2	6	0 3			0	1		0		4		67%		
4	Return on investment	+2:1	10.8 to 1	2 to		4 t	o 1	2	to 1	5 to	1	5.7	to 1	5.7	to 1	53%
	PIR 1: SUSTAINABLE MARKET LINKAGES FOR BIH PRODUCERS BUILT															
5A	Percent change in the value of trade of agricultural commodities linkable to FARMA's assistance	2%	9%	89	%	-2	2%	-;	3%	3%	6	-8	3%A	-2	%	-22%
5B	Percent change in the value of international exports of agricultural commodities linkable to FARMA's assistance in participating producer organizations	10%	84%	T:24%	F:167%	T:22%	F:15%	T:9%	F:138%	T:14%	F:- 5%	T:- 2%	F:19%	T:72%	F:628%	86%
6	Number of producers in selected sector/sub-sectors achieving certifications aligned with EU standards and requirements	9	50	2 22			6	9		13		52		104%		
	PIR 2: ACCESS TO FINANCE	INCREASED														
7	Amount (USD) of private financing mobilized with DCA-guarantee	2,000,000	4,000,000	86,25	53[2]	1,042,	474[3]	67,4	116[4]	0		184,0	001[5]	1,380),144	35%
8	Value of FDI (USD) accessed by selected POs with FARMA assistance	1,500,000	9,047,243	5,843	3,328	()		0	1,703	,915	1,04	4,672	8,591	.,915	95%

²² The FARMA project carries out data collection once per year, at the end of the first calendar quarter, to measure results from the previous year. Year-end report had estimated values because the agricultural year was not yet completed and the books closed.

ABased on data for the first 6 months of the calendar 2014 (official data of the BiH Foreign Trade Chamber)

FAF TAE	RMA PERFORMANCE MONITORING BLE	YEARLY TARGET (YEAR 5 - 2014)	LOP TARGET (Years 1-5	Year 1	Actuals	Year 2	Actuals	Year 3	Actuals	Year Actu		Year 5 I 201	Est. Aug L4*	LoP To	tal**	Accomplishment rate (actual results vs. target)
		2014)	1/2 *)	2010-	2009	2011	-2010	2012	2-2011	2013-2	2012	2014	-2013			LOP (Years 1-5 ½*)
	PIR 2: ACCESS TO FINANCE INCREASED															
9	Percent change in the value of loans and investments in assisted POs	10%	55%	49	%	5	%	1	3%	419	%	2	%	118	3%	205%
	PIR 3.PRODUCER ORGANIZATIONS AND OTHERS COUNTERPARTS' CAPACITY BUILT															
	Number of agriculture-related			31			39		39	40	•	3	_	56	~	
10	POs benefiting directly from the FARMA project (F-indicator)***	35	572	M: 100	F: 17	M: 85	F: 18	M: 17	F: 19	M: 17	F: 2	M:18	F:4	M:233	F: 60	98%
	[6]			N/A:	197	N/A	:36	N/	′A:3	N/A:	21	N/	A:9	N/A: :	270	
	Number of farmers, processors			3,2	96	7,5	39	3,3	326	3,85	57	3,6	577	21,6	95	
11	and others who have adopted new technologies or management practices made available for transfer as a result of FARMA assistance (F- indicator)	4,500	23,018	M: 2,480	F:816	M: 5,971	F: 1,568	M: 2,299	F: 1,027	M: 3,001	F: 856	M: 2,813	F:864	M:16,564	F:5,131	94%
	PIR 4. ENHANCED POLICY	ENVIRONMEN	IT TO BENEFIT	COMPETIVI	ENESS OF	BIH AGRIC	CULTURAL	GOODS								
12	Number of policy reforms analyzed with FARMA assistance (F-indicator)	4	27	6	5	-	7		6	4		7	7	30)	111%
13	Specific policy constraints identified and action plans developed (qualitative)	1	6	2		2	2		0	1			L	6		100%
14	Number of environmental screenings/assessments completed	13	85	-			-		-	-		4	3	11	5	160%

^{*}results as of August (08/31/2014).

^{**}based on estimates as of August 2014. The year-end (12/31) results may differ significantly.

^{***} to avoid double counting (as the contractual year covers Q3 and Q4 of 2013 results, while the updates relate to calendar year) indicators #10, #11, #12, #13, #14 which include results attained as of 3/31/2014 (running total).

^[1] T- change for all three sectors; F- change for women-owned or operated enterprises only

^[2] conversion as of September 2010

^[3] conversion as of September 2011

^[4] conversion as of 1/3/2013.

^[5] conversion as of September 2014

^[6] The project works with a number of organizations, commercial or other, in domain of agriculture where the organization type of not sole-ownership or proprietorship- especially in first year. Thus, in those cases owner's gender is not recorded. For instance, this is the case with agricultural associations).

RESULTS

In this section of the report, we provide discussion on the most important results and/or changes in monitoring and evaluation indicators both on an annual basis (September 2013 — August 2014) and over the period of the project's performance in relation to the baseline. We focus our discussion only on those results which are not self-explanatory in order to demonstrate how we measure results and to facilitate evaluation of the data reported.

At the end of the first calendar quarter each year, the FARMA project collects data to measure results from the previous year. This is due to local tax reporting requirements, since the beneficiaries report actual financial data at the end of the calendar year. Thus, the reporting cycles of the project and its beneficiaries are not congruent, which prevents the project from providing actual data when the project's annual report is written at the end of the third calendar quarter. The seasonality effect (the fifth project agricultural season was ongoing during the development of the Year 5 annual report) also adds to this issue. Hence, the project is not yet able to report on the actual results achieved, but is able to report on the estimates of the project beneficiaries. Upon completion of the agricultural cycle (first quarter of 2015), FARMA will collect the data and information required to report on actual changes in these indicators attained during 2014. Those data will be provided in the final project report (since the FARMA project completes its operations in May 2015, no estimates or actual data would be available at that time).

INDICATOR I. INCREASE IN SALES

Total sales of FARMA beneficiaries are estimated to have risen by 2% in relation to the previous year, or 56% since the start of the project (LOP target was 50%). The growth rate in all sectors slowed down significantly in relation to previous year. This is unsurprising, since the devastating floods and landslides not only affected primary production, they also significantly damaged the road network, disrupting the transportation of goods to markets for quite some time.

	Value of sectoral sales (BAM)									
Sector	2009	2010	2011	2012	2013	Aug 2014*				
Dairy	132,808,838	157,213,600	173,197,000	217,468,014	254,657,467	261,904,846				
F&V	80,349,475	87,021,414	95,681,011	95,006,849	106,511,046	108,708,662				
MAPs	17,493,190	24,197,276	27,337,252	30,278,937	34,681,464	36,111,754				
Totals	230,651,503	268,432,290	296,215,263	342,753,800	395,849,977	406,725,262				

*estimates of the beneficiaries for the first 8 months of 2014

Change in value of sectoral sales (percent) ^A								
Sector	Y1	Y2	Y3	Y4	Y5 est.	LOP (2009-Aug 2014)		
Dairy	18%	10%	22%	15%	2%	79%		
F&V	8%	10%	-1%	1%	2%	16%		
MAPs	38%	13%	10%	14%	4%	78%		
Totals	16%	10%	14%	11%	2%	56%		

^{*}estimates of the beneficiaries for the first 8 months of 2014

ANOTE: As the base changes each year (new beneficiaries may be added and some may be lost), the percentages cannot be added year-to-year but are calculated relative to the current base-set. For example, a simple comparison of 2009 vs. August 2014 results would yield an increase of 76% whereas the <u>actual</u> increase in beneficiaries' sales over the monitored period was 56%. The same applies to sectoral results. Arithmetic comparison (base year 2009 vs. August 2014) would yield much higher sectoral results: dairy, 97% growth; fruit and vegetable, 35% growth; MAPs/honey, 106% growth.

In addition, FARMA's focus on flood assistance and recovery, coupled with the planned reduction of scope and depth of the project's activities due to the then-planned February 2015 closing date, affected this progress. FARMA turned to assisting those in greatest immediate need to maintain production and jobs, while reducing activities with other

producer organizations. Still, the fact that the FARMA beneficiaries are estimated to have been able to maintain growth despite adverse circumstances is a testimony of the sustainable advances made in all three sectors.

The recorded growth is a result of the combination of factors. First, dairies managed to shift their exports to the east, selling their milk and value-added products to non-EU neighboring (Serbia, Montenegro) or countries in relatively close proximity (Kosovo, Albania). Further, closure of Croatian market forced local dairies to refocus not only on exports but on local markets.

The official statistics corroborate this trend in the dairy sector. If we consider the growth of purchases of milk from small farmers by the dairies, we can see that quantities increased significantly. According to data from the Entity Institutes for Statistics, in the first seven months of 2014, quantities of milk procured in the RS increased by 5%, while in Federation BiH, they increased by 8% over the same period. This means that for BiH (national level, but without Brčko District) the quantity of milk procured by the dairies increased by 7%.

Milk buy-off Jan-July ('000 liters)	2013	2014	Change (Δ2014-2013)
RS	49,619	52,044	5%
FBiH	77,649	84,139	8%
BiH Total	127,268	136,183	7%

However, milk production and buy off was lower in May 2014 than May 2013, at least in the RS.

Milk buy-off in May ('000 liters)	2013	2014	Change (Δ2014-2013)
RS	8,002.4	7,539.7	-6%
FBiH	12,258.2	13,096.9	7%
BiH Total	20,260.6	20,636.6	2%

The growth in sales of fruits and vegetable is primarily a consequence of continued growth in the berry sector. Advances made in the area of production of new, market-demanded fruit varieties; introduction of new production technologies; and investment in dissemination of good practices in production and cold chains have provided the foundation for sustainable sectoral advances. The FAO's report on the BiH berry sector concludes the same: "The technological progress of [berry] fruit producers has allowed a significant productivity increase due in particular to the production during the first year. This makes [the product] significantly more competitive on the market."²³

This growth is even more significant due to the fact that the fruit and vegetables sector has been most affected by adverse weather conditions throughout the life of project. Floods in 2010 severely affected production in some regions of the country. A double-punch of extreme snowfalls and severe drought in one year (2012) reduced production significantly, even forcing some FARMA beneficiaries into bankruptcy. Production was just recovering over the period of 2013 into 2014, just to be negatively impacted again by the floods and heavy rains. Hence, we believe that barring extreme climate events, the growth in this sector is going to be much higher over the coming years, even after FARMA assistance ends. The structural improvements made with assistance of the FARMA project represent a foundation that the project's beneficiaries know how to use to maximum advantage.

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²³ "The fruit and vegetable sector in Bosnia and Herzegovina," FAO Regional Office for Europe and Central Asia, pg. 105 (2012)

When it comes to MAP/honey sector, this year's growth was spurred by the increasing production and collection of mushrooms from the wild. Rain, which decimated some other crops, benefited mushrooms, and the beneficiaries capitalized on significantly higher quantity of raw materials.

Unfortunately, more impressive growth in this sector was hampered by lower production of honey and lower yields of some plants. The frequent rains throughout the country prevented honey bees from foraging on crops, thus affecting production of honey negatively. Additionally, production of honey had been severely impacted by the floods, despite the fact that majority of FARMA's beneficiaries do not reside in the flood-affected regions. Those that do, however, experienced significant losses, as their beehives were destroyed and the bee population lost.

INDICATOR 2. CHANGE IN EMPLOYMENT IN PARTICIPATING PRODUCER ORGANIZATIONS

The official unemployment rate in 2013 was 27.5% (male: 26.5%; female: 29%).²⁴Overall, 18.9% of all employed persons in BiH were employed in agriculture.

FARMA's key indicator for agricultural employment is full-time employment, which is primarily based in agri-food processing or very large, commercial farms. While this indicator is important, it excludes part-time and seasonal employment in primary production and agri-food processing as well as self-employment and income generation opportunities for rural households. Therefore it is important to consider the change in full-time agricultural employment in the context of other employment and income-generation opportunities that have opened as a result of FARMA efforts.

With these in mind, it comes as no surprise that employment in such a dynamic and seasonally affected industry as agriculture experience significant movements. This is clearly visible in the FARMA-beneficiary organizations (table below).

Year	Full-time employment in FARMA beneficiaries	Change in Number of Jobs Y-O-Y	Change Y-O-Y (percent)
2009	2,013	-	0%
2010	2,230	217	11%
2011	2,414	184	8%
2012	2,330	-84	-6%
2013	2,705	297	12%
Aug 2014	2,661	-61	-2%
LOP Change*		137	2%

^{*} The LOP change calculation is based on a PO-specific baseline, taking into account the fact that some beneficiaries have been added (and lost) throughout the life of the project. Please note that a pure arithmetic addition of changes would yield a significantly higher result: 648 jobs (nominal, taking into consideration ebb and flow), instead of actual 137 jobs.

One fact immediately stands out: In the years when agriculture production was negatively affected the most (in 2012 and 2014), the beneficiary organizations were shedding jobs. Some beneficiaries had to declare bankruptcy, while some beneficiaries were purchased by a larger corporate entity only to be closed (most recently PPM Dairy Tuzla).

Owing to low technical sophistication, agricultural production in BiH is a very labor-intensive industry. Typically, an agricultural producer needs more labor to attain higher production volume (in a good season). For example, to get more berry fruits, you need more pickers before the product quality diminishes. This is one reason we see such swings when it comes to part-time and seasonal employment statistics in this industry.

²⁴ Labor Force Survey; BiH Agency for Statistics available at http://www.bhas.ba/tematskibilteni/BHAS_Ars_BH_press.pdf

The LOP target of 45 percent growth in full-time employment has not been, nor it will be, met. The total growth in employment among FARMA beneficiaries has been 2 percent between 2009 and 2014, or 137 new jobs. The LOP calculation considers the ebb and flow of full-time jobs in individual beneficiaries over the LOP and takes into account job losses. These include job losses that have occurred among several greenhouse farmers due to heavy snow in 2012 (bankruptcy) and job losses in several agri-processors due to owner restructuring or purchase and closure by foreign conglomerates. (For example, entire PPM Tuzla dairy, which employed 63 people in its last year of operation, down from 106 in 2011.)

It is also important to consider part-time and seasonal employment, as this type of employment is also important for a number of rural households. This number was 2,930 jobs in 2014 (up by 200). Most of the agricultural employment is in fact in primary production, but this is not taken into account in FARMA's indicator on employment. More than 32,000 people are suppliers of raw materials to FARMA-assisted producer organizations (these are indirect employees or cooperants), and that number remained stable in relation to previous year.²⁵

INDICATOR 3. NUMBER OF NEW PRODUCTS ELIGIBLE TO ENTER EU MARKETS

FARMA expected that at least one new product (potatoes) would become eligible to enter EU markets in 2014, but this did not happen during the year. Hence, the LOP goal of six (6) new products is not yet accomplished.

That said, we believe that the potatoes will receive EU approval in the first part of 2015, since the EU FVO assessment has been generally positive. The EU FVO has requested to see the monitoring report for 2014, which we expect tobe the final EU demand prior to approval of exports.

Enabling the export of dairy products to the EU will take longer, as BiH has not fully met EU requirements.

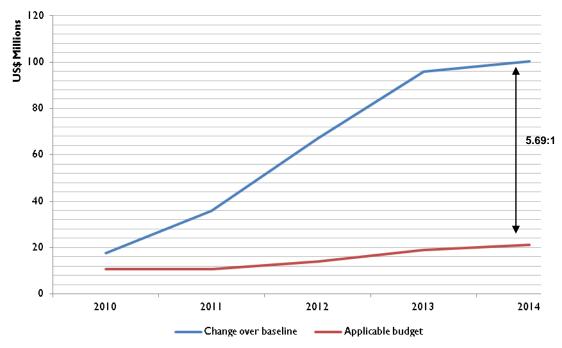
INDICATOR 4. RETURN ON INVESTMENT (ROI)

While ROI as an indicator is important in measuring financial returns of certain business investments, it is less meaningful in measuring the impact of development projects. In FARMA's case, the ROI is simply a division of two numbers – PO sales and FARMA contract. However, FARMA has chosen to use PO sales to measure returns as PO sales have a more direct link to the project and yield the most meaningful estimate of impact attributable to the project than other measurements.

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²⁵ Difference is minor- 1.6% increase in 2014

Sales Above the Baseline vs. Applicable Project Budget



The calculation of ROI uses the LOP value of the USAID/Sida FARMA project. Contract modifications have increased this value over time. Therefore, those ROI figures are based on the contract value effective during the period under consideration. We caution against comparing these figures to those reported earlier, precisely because the incomparable bases.

The annual ROI of the project was 4.73:1. The LOP ROI expressed as the U.S. dollar amount of {[(est. sales Aug 2014-sales 2009)/sales 2009] ÷ total project budget²⁶} was 5.69:1. This means that by the end of 2014, each dollar invested by the project donors has yielded almost 6 dollars of economic benefits to FARMA beneficiaries. Despite this positive leveraging, this also means that the four-year LOP goal of 8.8:1, and the 5½-year LOP goal of 10.8:1 have not been met.

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²⁶ Increased to reflect the latest contract amendment bringing the value of denominator ("investment") to US\$22 million

INDICATOR 5 A. BALANCE OF TRADE

The balance of trade in agricultural commodities, based on the official statistics of the BiH Foreign Trade Chamber of Commerce (results available for the first six months of 2014), does not provide a conclusive indication of the annual trends in foreign trade.

TRADE BALA	TRADE BALANCE- three sectors combined										
YEAR	EXPORT	IMPORT	(EXPORT÷ IMPORT)×100	Annual Change	LOP Change						
				(%)	(%)						
2009	136,515,432	260,909,500	52%	0%	0%						
2010	165,537,800	275,997,982	60%	8%	8%						
2011	174,408,886	299,398,566	58%	-2%	6%						
2012	170,069,826	309,674,050	55%	-3%	3%						
2013	182,093,205	314,065,938	58%	3%	6%						
2014 (Jan-	67,526,436	148,175,053	46%	n/a	n/a						
Jun)											

Dairy sector exports are in significant decline. If we compare 6-month results of the sector attained in 2013, with the results over the same period of this year, export of dairy products from BiH declined by 34 percent (but it is important to note that significant exports of BiH dairy products occurred in May and June 2013 just before Croatia's entry to the EU so annual comparison will be much more useful). Dairy products cannot be exported to EU, and the export to other CEFTA countries is not sufficient to make-up for the loss.

However, the sectoral imports are also in decline. Over first six months of this year, imports declined by 19 percent in relation to same period of 2013. This development indicates that domestic producers focused on domestic markets to minimize EU export losses, which was an expected and logical action of producers. Refocusing sales efforts in domestic markets allows producers to substitute (to a certain extent) export revenues with in-country sales proceeds.

In fruit and vegetable sector, the first six months of 2014 saw increase in exports coupled with simultaneous decrease in imports. In relation to the same period of 2013, exports grew by 21 percent, and imports declined by 11 percent. The growth rates differ significantly between plant cultures.

The export of frozen raspberries increased by almost BAM 5 million (65 percent increase in the first six months of 2014, in relation to same period in 2013). Export of apples grew by 225 percent (from BAM 0.8 million in first six months of 2013 to BAM 2.6 million in the same period of 2014). On the other hand, export of potatoes declined significantly- by 61 percent.

This MAP sector surpassed the level of exports attained in the first six months of 2013 by 19 percent, owing to (for this sector relatively modest) growth in export of dried mushrooms and essential oils.

It is difficult to estimate the calendar year results due to floods as well as trade sanctions of EU and U.S. on the Russian market. If Russian customers continue seeking alternate sources of agricultural products, the trade balance could improve. However, we may also see increased exports from the EU to BiH (dairy and meat producers are claiming that this is already happening), which could cause dampening of prices of locally produced goods as well – good news from consumers but bad news for farmers.

For long-term sustainability of all three sectors, BiH must meet EU standards. Other neighboring countries are also moving toward EU membership; hence these alternative markets will also be lost if BiH does not meet EU requirements for the export of milk into the

EU. Once the EU approves the import of BiH milk into the EU, the balance of trade should improve significantly – but this is unlikely to happen soon. In addition, for import substitution, local dairies must continue to improve their internal efficiencies and marketing, and persist in innovation and development of new final products - something FARMA has helped over the life of the project.

INCREASE IN EXPORTS OF FARMA BENEFICIARIES

The exports of FARMA beneficiaries are estimated to have declined by 2 percent YOY, but it is still expected to remain above the 150 million KM-level. The exports of these beneficiaries is estimated to have increased by 72 percent over the LOP (the LOP goal is 84 percent). Given overall export-related developments (inability to export to EU; effect of floods; low yields recorded in this year; excess supply in EU-countries resulting in reduced prices due to sanctions to Russia), it is extremely unlikely that the LOP goal will be met by the end of the calendar year.

	Value of sectoral exports (BAM)									
Sector	2009	2010	2011	2012	2013	Aug 2014*				
Dairy	37,308,855	47,720,720	56,720,000	67,142,167	73,719,934	70,300,000				
F&V	29,146,380	31,641,685	41,342,016	39,832,588	61,318,304	59,049,935				
MAPs	8,586,403	13,341,520	15,133,696	16,789,858	20,362,878	23,147,200				
Totals	75,041,638	92,703,925	113,195,712	123,764,613	155,401,116	152,497,135				

Each subsector increased exports significantly over the period 2009-2013, with an estimated decline in exports for dairy and fruit and vegetable sector in 2014. The inability to export milk to Croatia (now an EU member) reduced the rate of export growth of the dairy sector significantly, in relation to previous years. According to associations of dairy farmers in the RS and FBiH, the sector is aalso affected by EU/Russia trade wars, as subsidized milk from the EU is entering BiH in large quantities thus causing greater competition for domestic producers and price declines (Note that MoFTER has stated that they have not seen evidence of increased imports from the EU).

Change in value of sectoral exports (percent)*						
Sector	Y1	Y2	Y3	Y4	Y5*	LOP (2009-Aug 2014)
Dairy	28%	19%	18%	5%	-5%	73%
F&V	9%	31%	-4%	23%	-4%	51%
MAPs	55%	13%	11%	21%	14%	160%
Totals	24%	22%	9%	14%	-2%	72%

^{*} As the base changes each year (new beneficiaries may be added and some may be lost), the percentages cannot be added year-to-year but are calculated relative to the current base-set. For example, a simple comparison of 2009 vs. Aug 2014 results would yield an increase of 103% whereas the actual increase in beneficiaries' sales over the monitored period was 72%.

FARMA beneficiaries in the Fruit and Vegetable sector increased their export by 51 percent over the period 2009-Aug 2014, despite the drop in exports experienced in this year. Despite this, the results attained in domain of exports are remarkable. It is our estimate that in absence of negative factors (such as adverse weather conditions) that the value of sectoral exports could have grown by at least 10 percent annually (on average).

The beneficiaries from the MAPs sector managed to increase their exports by 160 percent over the period of 2009-Aug 2014. Growth is exports is also seen in 2014 (estimated at 14%) partly due to the very good season for wild mushrooms.

The political factors and climatic changes in general, remain greatest threats to agriculture in BiH. The future growth rates in exports depend primarily on minimization of risks to

production and meeting EU standards. Once these preconditions are met, we are certain that local agricultural producers and our beneficiaries from these sectors will be able to capitalize on their competitive advantages.

PERCENT CHANGE IN THE VALUE OF LOANS AND INVESTMENTS IN ASSISTED POS

FARMA has placed significant efforts to increasing the ability of POs to obtain new financing from commercial institutions (for more explanation, see appropriate sections of this report). Overall, there was a 2 percent increase in the value of loans in assisted POs between 2013 and 2014 and a 118 percent increase between 2009 and 2013, thus exceeding the LOP target of 55 percent.

YEAR	Total value of outstanding loans				
	Value (BAM)	% change annual			
2009	17,105,652	0%			
2010	25,538,605	49%			
2011	26,720,778	5%			
2012	30,441,933	13%			
2013	57,598,733	41%			
2014 Aug	59,021,653	2%			
LOP Change*		118%			

^{*} As the base changes each year (new beneficiaries may be added and some may be lost), the percentages cannot be added year-to-year but are calculated relative to the current base-set. For example, if we calculate a percent change from 2009-2013 in a conventional way [(loans 2014-loans 2009)/(loans 2009)], the rate of change is 245 percent, rather than 118 percent, calculated on the basis of current base-set.

The observed growth follows the upward trends in the overall growth of bank loans. However, the examination of beneficiaries' loan structures reveals that the observed growth is a result of (relatively) modest new loans attained by a majority of POs, on top of earlier (unpaid) loan obligations. The majority of these loans are working capital loans, which again, indicate persistent liquidity issues, which are structural in their nature. Hence, we believe that this increase is not indicative of the investments in expansion of productive capacity. It appears that a large number of POs are taking out new loans to pay outstanding obligations, which cannot be considered a positive development, especially when considering the potential for capitalization on investments.

CONTRACTOR SELF-ASSESSMENT

QUALITY OF PRODUCT OR SERVICE

Since the start of the project, FARMA has assisted over 530 POs and more than 17,000 farmers, thus having a significant impact on the BiH agricultural sector.

SCHEDULE

All deliverables were submitted on time or with minimum delays. Some activities were delayed due to additional project focus on flood relief and recovery, which cause postponement of some project activities, which were then subsequently completed. Also, the project frequently responds to USAID and Embassy requests, such as talking points for the Mission Director, on short-notice.

COST CONTROL

Proceeding in accordance with plan as scheduled. Cost control is divided into categories for efficient management: grants, subcontracts, and the prime contract. The disbursement of grants is on schedule with \$2 million currently obligated or disbursed along with ongoing active developments for additional grants in the final extension period of the project. The use of subcontracts is also on schedule. The management of the main contract is in line with the planned expenditures and is balanced with the implementation of the work plan.

BUSINESS RELATIONS

Continued to successfully leverage business relationships with multiple donors, governmental institutions, and NGOs to improve the capacity of FARMA beneficiaries.

MANAGEMENT OF KEY PERSONNEL

Mr. Toric, FARMA's Chief of Party (COP) is leading, overseeing, and molding the project team using a positive and effective management style.

PROJECT OPERATIONS

Technical activities of the FARMA project are fairly numerous and complex and need consistent and timely support from the FARMA operations team. This team carried out all operational and administrative tasks in support of the technical activities of the project. This ranged from handling the approval process through USAID for all matters (except those related to the U.S.- based employees) to organizing trainings, travel in and out of country, accounting and financing, budget and cost monitoring, personnel, procurement and logistics.

Appropriate communication tools, such as meetings, reports, success stories, events, etc. were used in the previous year to overtly communicate about FARMA to USAID, Sida and other relevant stakeholders. The majority of communication with the public occurred via our website, while communication with stakeholders ranged from informal meetings to formal reports. Project reports, promotional materials, brochures, other publications and visual materials were produced in a timely manner and in accordance with USAID's regulations and guidelines.

The focus of this team in previous year, together with the Monitoring and Evaluation/Beneficiary Database Administrator, was to create and maintain conditions for technical operations while ensuring the project operates in compliance with USAID regulations, Chemonics' policies, and the BiH laws. The focus of the team in the upcoming six months will be to ensure smooth project operations and support for technical teams through the end of the contractual period (May 2014).

